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Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

April 11, 1960

PMA MEETING REPORT PAGE 51

Baker TONNAGE
MOLYBDENUM CHEMICALS

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Ammonium Molybdate, C.P.
Sodium Molybdate, Technical
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CONNECTICUT
South Norwalk—McKesson & Robbins, Inc.*
Stamford—McKesson & Robbins, Inc.**
FLORIDA
Jacksonville—F. H. Ross & Co.
GEORGIA
Atlanta—F. H. Ross & Co.
Columbus—F. H. Ross & Co.
Savannah—F. H. Ross & Co.
ILLINOIS
Chicago—Central Solvents & Chemicals Co.
Chicago—McKesson & Robbins, Inc.*
INDIANA
Ft. Wayne—Hoosier Solvents & Chemicals Corp.
Indianapolis—Hoosier Solvents & Chemicals Corp.
KENTUCKY
Louisville—McKesson & Robbins, Inc.*
LOUISIANA
Baton Rouge—McKesson & Robbins, Inc.†
New Orleans—McKesson & Robbins, Inc.†
MARYLAND
Baltimore—Leidy Chemicals Corp.
MASSACHUSETTS
Fall River—Borden & Remington Co.
Stoneham—George Mann & Co., Inc.
Worcester—Chemical Sales & Service Co., Inc.
MICHIGAN
Detroit—Eaton Chemical & Dyestuff Co.
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Duluth—McKesson & Robbins, Inc.*
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MISSISSIPPI
Jackson—F. H. Ross & Co.
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Kansas City—McKesson & Robbins, Inc.†
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St. Louis—Missouri Solvents & Chemicals Co.
NEW HAMPSHIRE
Merrimack—New England Chemical Supply Corp.
NEW JERSEY
Newark—National Oil & Supply Co.
Paterson—Brown Chemical Co., Inc.
NEW YORK
Buffalo—Chemical Sales Corp.
Hicksville, Long Island—National Oil & Supply Co.
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Cincinnati—McKesson & Robbins, Inc.*
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OREGON
Portland—Van Waters & Rogers, Inc.
PENNSYLVANIA
Altoona—Western Penna. Chemical Co., Inc.
Erie—Western Penna. Chemical Co., Inc.
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Philadelphia—Pioneer Salt Co.
Pittsburgh—Western Penna. Chemical Co., Inc.
Reading—Textile Chemical Co., Inc.
RHODE ISLAND
Providence—Borden & Remington Co.
Providence—George Mann & Co., Inc.
SOUTH CAROLINA
Columbia—F. H. Ross & Co.
Greenville—F. H. Ross & Co.
TENNESSEE
Chattanooga—Burkart-Schier Chemical Co.
Knoxville—Burkart-Schier Chemical Co.
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TEXAS
Dallas—Van Waters & Rogers, Inc.
Houston—Van Waters & Rogers, Inc.
UTAH
Salt Lake City—Braun-Knecht-Heimann Co.
WASHINGTON
Seattle—Van Waters & Rogers, Inc.
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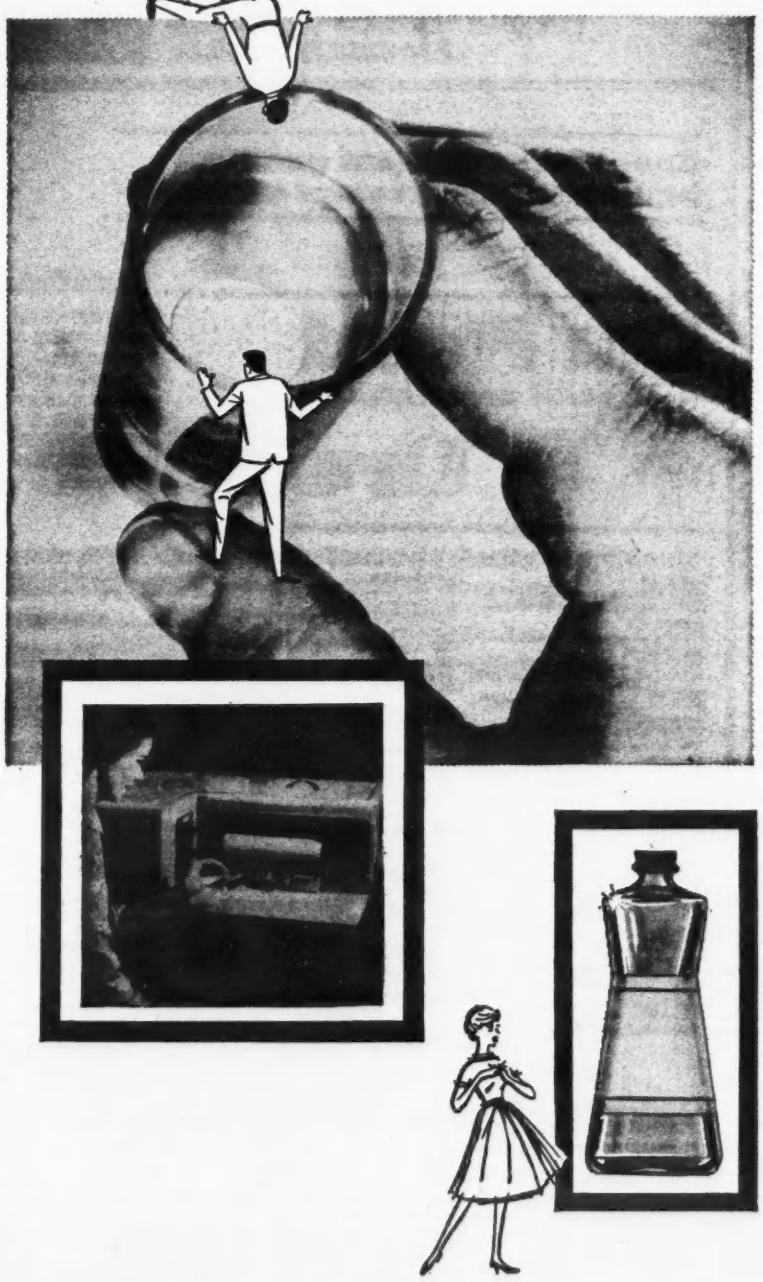

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FOOD MACHINERY AND CHEMICAL CORPORATION

Oil, Paint and Drug Reporter

Vol. 177 No. 16 30 Church St., New York 7, N. Y. April 11, 1960

ON THE BOARD: Arthur F. Brown, chosen a director by Hercules Powder Company, Wilmington, Del. President of Imperial Color Chemical & Paper Corporation since 1953, he will manage Hercules' new operating unit, the Imperial Color Chemical & Paper Department.

Rayon Sales Leak Set For a Butadiene Patch

Suffering a slow sales leak in the tire cord business, Industrial Rayon Corporation will probably find itself and Texas Butadiene & Chemical Corporation going into a merger just in time to patch things up. Behind the company's troubles, observers say, is the competition of nylon and a host of synthetic materials.

A proposed hook-up will be voted on by shareholders of both companies at special meetings called for April 29.

Under the merger, Industrial Rayon, based in Cleveland, Ohio, would be the surviving firm, but effective control of the new corporation would pass into the hands of five holdover directors of Texas Butadiene. The merger has been a-brewing since late last year (OPD, 12/28/59).

How 'Tyrex' Was Hit by Nylon

Just how hard the rayon company's "Tyrex" has been hit by nylon is disclosed in a proxy statement issued by the company. According to the report, Industrial Rayon lost $240,000 in the first two months of 1960 after losing $82,745 in the fourth quarter of last year. Losses were principally a result of price competition in the tire cord field, the company says.

As a source of hydrocarbon building blocks, Texas Butadiene will enable the new corporation to branch out into production of synthetic materials, observers say. Possibilities include polypropylene, adiponitrile (a nylon 6/6 intermediate) and caprolactam.

Under the terms of the proposed merger, all of the common and preferred stock of Texas Butadiene will be converted into 1,687,298 shares of Industrial Rayon, raising the total number of outstanding common shares to 3,538,553. Industrial Rayon presently has 1,851,255 shares of common stock outstanding.

On approval of the merger proposal, Hayden B. Kline, president of Industrial

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Food Additives Extension Granted for Another Year

The Food & Drug Administration last week extended the deadline until March 6, 1961 when an additional group of food additives must meet the tolerance requirements of the food additives law.

The agency's order states that conditions exist which make it necessary to grant the additional time for obtaining toler-

—Continued on page 37

Cancer Experts Do the Usual: Oppose the Disease But Argue On Value of Delaney Clause

Everybody is against cancer. A panel of twelve recognized experts in the field of cancer research has just wound up two days of discussing the Delaney cancer clause in the food additives law and the administration's pending color additives bill with the house commerce committee in unanimous agreement on only one point—they are all opposed to cancer. On the more important problem facing the house committee—whether the Delaney clause should be retained, repealed, or modified—the views of the scientist are almost as numerous as the members.

In general, the majority opinion seems to favor some modification of the wording of the Delaney clause to permit scientific judgment to play a greater role in decisions on questions involving carcinogens.

A Split on Tolerances Issue

But whether the law should be so changed as to permit the Food & Drug Administration to set tolerances for additives capable of producing cancer, opinions appear to be about equally divided.

What the net effect of the views of the experts will be upon the committee is not possible to foretell at this time. It is thought in most quarters that the scientists have given the committee ample arguments to support a revision of the Delaney clause, but from a practical standpoint the political aspects of the situation cannot be overlooked.

There is no question about it, the Delaney clause is a "hot potato," politically speaking, and much as some members might favor getting rid of the cancer per se doctrine, embodied in the clause, they are fearful of laying themselves open to a charge that they favor letting down the bars against cancer-producing additives being allowed in foods.

It is quite possible that the committee might hear more testimony on the issue before it finally gets down to considering the matter in executive session. Chairman Oren Harris of Arkansas indicated last week that he might invite Secretary of Health, Education & Welfare Arthur

—Continued on page 50

DuPont Antifreeze Entry Brings Things to a Boil

The antifreeze arena, lately featured by Dow Chemical Company's dramatic entry, looks likely to boil over with a brisk competitive fight as another chemical giant—E. I. duPont de Nemours & Co.—stakes itself out with newly-introduced "Telar."

Not to be taken lightly, duPont's challenge, unlike other "permanent" antifreezes, features the claim that "Telar" "can be used year after year . . . and never needs to be drained from a properly operating cooling system."

Moreover, the Wilmington, Del., company adds, tests indicate the product lasts the life of the auto.

In addition to providing antifreeze protection, "Telar" is also said to maintain efficient cooling through summer and winter. A unique feature of the product, according to duPont, is a signal that warns

—Continued on page 41

ADVANCED: William B. Yarborough, appointed a vice-president of the National Aniline Division of Allied Chemical Corporation, New York. He had been assistant to the president.

Witco Deals Itself In Again on Phthalic

Witco Chemical Company, a newcomer to the phthalic anhydride field, has dealt itself in for the second time on the industry's burgeoning expansion avalanche. The New York company has just disclosed plans to build a 30-million pound PA unit at an un-named east-coast site.

The new facility, using a naphthalene-oxidation process, is scheduled to be finished by the last quarter of 1961.

On completion of the project, Witco will have two integrated phthalic anhydride producing locations. The company's 20-million-pound Chicago unit went on stream last year.

But while Witco is hiking its stake in the game, others won't be idle. As the

—Continued on page 38

Pyrethrum Trade Shows Interest in Stockpile Sale

The government has started receiving contacts from pyrethrum processors and consumers in anticipation of unloading the last of the pyrethrum extract remaining in the national stockpile and considered to be in excess of needs—141,808 pounds.

This proposed fourth and last sale of the material is being offered in line with the agreement reached with industry

—Continued on page 68

Drug Men to Get Another Blasting: Kefauver Is Back

Drug manufacturers will be on the receiving end of another unfavorable publicity blast from the Kefauver antitrust investigating committee this week. The unit is resuming hearings tomorrow (April 12) in its probe of drug pricing—with a handpicked group of physicians and pharmacologists invited to air their complaints against the producers.

Later, the committee intends to call on the Food & Drug Administration for testimony on how officials go about giving clearances to new drugs, with particular emphasis on the quality of the products offered on the market by the smaller manufacturers.

To Query Special 'Approvals'

Officials also will be queried on reports that they have approved the marketing of new drugs over the objections of some competent researchers.

No date has been set for this testimony, however, and it is not expected to come until near the end of the investigation. Present plans of the chairman are to hold additional general hearings after the physicians and pharmacists have been heard and then move into the products field again with oral and anti-diabetic drugs next on the list.

The general hearings will feature the return of Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association, to the witness stand.

It is the aim of the Kefauver committee in the new series of hearings to break down the defense of the use of trade names by physicians in prescribing for their patients. Drug manufacturers have argued that the reason physicians prefer prescribing branded products for their patients is because of their lack of confidence in the unbranded product.

Nine witnesses have been lined up by the committee—six physicians, two pharmacologists and one economist. This week's schedule has been set up as follows:

Tuesday—Dr. William Bean, School of Medicine, Iowa State University; Dr. Hans Hopper, Mt. Sinai Hospital, New York; Dr. Frederick Myers, associate professor of pharmocology, University of California.

Wednesday—Dr. David D. Rutstein, Department of Preventive Medicine, Harvard Medical School; Dr. A. Dale Console, Princeton, N. J.

Thursday—Dr. Chauncey Leak, School of Medicine, Ohio State University and president of the National Association for the Advancement of Science; Dr. James E. Bowes, Salt Lake City, Utah.

Friday—Dr. Solomon Garb, Albany

—Continued on page 41

GAF Sale Legislation To Be Hearings Topic

Legislation permitting the sale of General Aniline & Film Corporation, New York, which was seized as enemy property by the government during World War II, will be the subject of public hearings May 24 before a subcommittee of the house commerce committee.

Two bills—HR 404 and HR 1345—are under consideration by the committee. They would authorize sale of the $100 million chemical firm in advance of settlement of court litigation over ownership rights.

Proceeds from the sale would be placed in escrow until the litigation had been completed.

Black Pepper Trading Is Back in New York

Bulk buyers of black pepper need no longer place their orders in the Far East. Trade in black pepper has resumed on the New York Produce Exchange, after having been suspended since the start of World War II.

The exchange becomes the only market for this spice in the western hemisphere, and with Cochin, India, comprises the world's entire trading facilities.

This service was dropped by the exchange when World War II hostilities made it impossible to move raw material supplies from producing areas.

Aspirin Continues to Break In On Coffee Break

The morning coffee break seems to have a competitor. And so does the afternoon break for a "Coke." The latest entrant into the "break" field is "Bayer" aspirin, which already has two successful summer use campaigns behind it and is pointing toward a third.

Glenbrook Laboratories Division of Sterling Drug, Inc., which sells the well-known aspirin tablets, is all set to go on its "Take a 'Bayer' Break" campaign which it initiated a couple of summers back and now happily refers to as "a highly successful hot weather sales promotion."

The familiar theme of the promotion has been retained for the current year. It is this:

"When You're Feeling 'Heat-Beat' (Tense, Irritable, Headachy) . . . Take a 'Bayer' Break."

This year's sales campaign is expected to repeat the success of the last two, says the New York producer.

Glenbrook notes that the additional volume created by last summer's promotion made it possible for many retailers to do record summer business. Retailers can be expected to put maximum effort behind a promotion that has "proven" itself, the company notes.

From the merchandising standpoint, Glenbrook has prepared a floor stand with a mass display of "Bayer" aspirin 100's, 50's and 24's. The display is 53½ inches high, 17½ inches wide and 14 inches deep, which Glenbrook feels is just the right size for a "Heat-Beat" display.

To show just how seriously it is thinking about the promotion, Glenbrook has announced that it is supporting the campaign by heavy advertising in national magazines and on sixteen popular television shows.

Cutter Reply to FTC Charges: 'We've Been Doing It 30 Years'

Charged by Federal Trade Commission with price discrimination, Cutter Laboratories will affirm that its pricing policy has followed competitive practices current in the drug indusry for over thirty years. This is indicated in a statement made last week by Fred A. Cutter, president of the Berkeley, Calif., company, after the FTC complaint was made public. Quantity discounts allowed by Cutter, the FTC complaint alleges, may "result in a substantial lessening of competition."

Key to the outcome of the FTC action depends on how the discounts are found to effect competition. Under the 1936 Robinson-Patman law, such discounts are outlawed if they tend to lessen competition or create a monopoly. Cutter has been granted thirty days in which to file an answer. A full commission review will follow.

FTC Sees Category Discrimination

Another area of alleged price discrimination cited by FTC involves discrimination among different categories of purchasers irrespective of quantity.

According to FTC, Cutter grants a straight 15 percent discount to "service retailers," as against the following scale of discounts for buyers in the "pharmacy" category: 15 percent on invoices totaling $50 or more, 7.5 percent on $25 to $49.99 and no discount on orders totaling less than $25.

"The result," says FTC, "is that a service retailer gets a 15 percent price advantage over a competitor in group No. 10 (pharmacy) where both purchase less than $25."

The ruling on this point would depend on whether it is true, as the commission alleges, that buyers in these two categories compete with one another.

Replying to the overall complaint, Mr. Cutter says: "The passing on of a manufacturer's savings resulting from quantity purchases usually results in lower costs to the consumer. We don't believe that by meeting competitive practices, which have been current in the industry for over thirty years, by giving quantity discounts on our products, we are guilty of violating the antitrust laws."

Plastics Limelight Falls On the Man Who Knows

In the limelight with plastics today is the man who knows how to handle them. That is what a spokesman for Celanese Plastics Company says.

Technical experts, according to William P. Orr, vice-president of the Celanese Corporation of America subsidiary, can swing a customer's decision for or against the supplier. They are the "hidden persuaders" of the plastics world.

Mr. Orr's remarks served to underscore the New York company's exhibit at last week's National Packaging Exposition in Atlantic City, N. J. The display was built around the theme of technical service capabilities.

Propylene Oxide Plant A Project for Carbide

Union Carbide Corporation's Italian affiliate, SPA Celene, has divulged plans to construct a propylene oxide plant at Priolo, Sicily. Initial output of the unit is expected to total 25 million pounds yearly.

In a report out of New York headquarters. Carbide notes that output from the facility will be used captively for processing into propylene derivatives which in turn will be moved to plastics and automotive markets.

Jointly-owned by Carbide and Societa Edison of Milan, Celene recently put a polyethylene plant on stream which it is now expanding to a productive capacity of 65 million pounds a year.

Other Celene operations at Priolo will include solvent and plasticizer units, now under construction, which will have a combined productive potential of 70 million pounds.

Shawinigan Elevates Wright

G. K. Wright has been named general manager of B. A.-Shawinigan, Ltd., an affiliate of Shawinigan Chemicals, Ltd., Montreal, Que. He succeeds R. H. Hall, who was recently appointed assistant to the vice-president of research and development for Shawinigan Chemicals and elected to the board of directors of B. A.-Shawinigan.

Potash Prices Are Slated For Boosts by US Borax

United States Borax & Chemical Corporation today (April 11) announces price increases on all agricultural grades of potash, effective July 1.

The price of standard muriate will be advanced 3 cents per unit K_2O and the price of coarse and granular muriate will rise by 3½ cents per unit K_2O. This will represent a price advance of approximately $1.80 per ton of product.

The increases apply to potash deliveries on and after July 1 to domestic customers and to the Potash Export Association. US Borax is a member of the association and sells its export tonnage through that group.

The announcement also says the current June price differentials will be eliminated in 1961 and the 1 percent cash discount will be discontinued. Terms will be those generally prevailing in the chem-

—Continued on page 41

The Week's Price Changes

Carbon Black, Citronella Oil, Carnauba Wax Advanced. Ascorbic Acid, Casein, Copra, Soybean Meal Reduced.

Prices Advanced

Carbon black, 6c. to 8c. per lb. (p. 70).
Carnauba wax, Ceara, crude, 4c. per lb. (p. 73).
Refd., 6c. per lb. (p. 73).
Parnahyba, crude, 6c. per lb. (p. 73).
Refd., 6c. per lb. (p. 73).
Citronella oil, Ceylon, 10c. per lb. (p. 67).
Cocoa butter, 1c. per lb. (p. 73).
Cottonseed oil, crude, ¼c. per lb. (p. 73).
Refd., ½c. per lb. (p. 73).
Greases, ¼c. per lb. (p. 73).
Lard, cash, ½c. per lb. (p. 73).
Linseed meal, $2 per ton (p. 73).
Patchouli oil, 40c. per lb. (p. 67).
Peanut oil, crude, 1c. per lb. (p. 73).
Refd., 1c. per lb. (p. 73).
Rapeseed oil, ¼c. per lb. (p. 73).
Tallow, edible, ¼c. per lb. (p. 73).
Inedible, ¼c. per lb. (p. 73).
Tangerine oil, Fla., 50c. per lb. (p. 67).

Prices Reduced

Ascorbic acid, 15c. per lb. (p. 63).
Casein, Argentine, ¼c. per lb. (p. 70).
Clove leaf oil, 5c. per lb. (p. 67).
Coconut oil, crude, ¼c. per lb. (p. 73).
Copra, $10 per ton (p. 73).
Corn oil, crude, ¼c. per lb. (p. 73).
Refd., ¼c. per lb. (p. 73).
Linseed oil, ½c. per lb. (p. 73).
Oiticica oil, ¼c. per lb. (p. 73).
Soybean meal, $1 per ton (p. 73).
Soybean oil, crude ½c. per lb. (p. 73).
Refd., ½c. per lb. (p. 73).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

April 8, 1960	April 1, 1960	April 10, 1959
110.85	110.85	111.52

Methanol May Be a Keyholder

Methanol may hold the key to a broad new field of plastics modifications, the American Chemical Society has learned at the national meeting currently going on in Cleveland, Ohio. In radiation-induced graft copolymerization, the chemists have learned, addition of methanol has been found to permit speedier attachment of styrene to polyethylene. Describing the new method were three scientists of Radiation Applications, Inc., a nuclear research firm in Long Island City, N. Y. A paper prepared jointly by Dr. George Odian, Albert Rossi and Edward Trachtenberg was delivered by Dr. Odian.

As an example of the practical implications of the discovery, the scientists noted that low radiation doses would thereby be permitted in grafting processes.

"This," they say, "may extend the applicability of radiation-induced graft copolymerization to many radiation-sensitive polymers heretofore outside the realm of treatment."

Introduction of methanol, the scientists explain, achieves an accelerative effect by immobilizing the graft polymer chains enough to inhibit their rate of termination. Such a slowdown leads to a higher overall rate of graft copolymerization.

Before that broad new field of applications becomes a reality, however, further experimentation will be necessary to determine whether the accelerative effect is generally applicable to other monomer-polymer systems.

The paper will be reprinted in the 1960 *Journal of Polymer Science*.

NEW MANAGER: Daniel P. Wedel, made manager of plastics sales for the paint division of Pittsburgh Plate Glass Company, Pittsburgh, Pa. He succeeds Dr E. H. Haux, who has retired.

Anken Files With SEC To Raise Purchase Funds

Anken Chemical & Film Corporation has filed with Securities & Exchange Commission covering proposed sale of 145,703 shares of common stock to be offered to holders at the rate of one new share for each six held.

Anken proposes to use proceeds of the sale to finance in part purchase of the photocopy section of the photo records division of Sperry Rand Corporation.

'Marlex' Prices to Meet Postings of Competitors

"Marlex" medium and low density polyethylene resins, which have just been introduced, will be competitively priced, Phillips Chemical Company reports. For most of the materials, the price will be 32½ cents a pound on shipments of 20,000 pounds of more, says the Bartlesville, Okla., firm.

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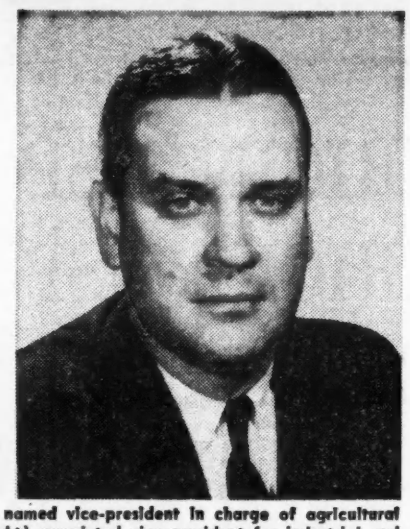

IN NEW LILLY UNIT: O. B. Swearingen (left) named vice-president in charge of agricultural products marketing and Frederic D. Randall (right) appointed vice-president for industrial and home products marketing, by Eli Lilly & Co.'s recently formed division, Elanco Products Company. Mr. Swearingen has been with the Indianapolis, Ind., parent company since 1923. Mr. Randall joined the Lilly organization in 1947.

Lead and Zinc Interests Get Set For Showdown on Relief Legislation

Mining states representatives in congress are girding for a show-down fight with the administration over relief legislation for the lead and zinc industries this session. Two goals are being set out: (1) Higher import duties on the metals to replace or implement the quota system now in effect, and (2) an empowering of the Tariff Commission to submit recommendations for legislative action in investigations it conducts in response to congressional requests.

IN TECHNICAL POST: Dr. Charles H. Schramm, appointed scientific director of J. T. Baker Chemical Company, Phillipsburg, N. J. He had been director of research.

The two proposals stem from recent reports of the Tariff Commision on fluorspar and on lead and zinc, in which the commission took the position that it had no authority under the law to recommend legislation to congress in response to a simple senate or house resolution.

Members Want Relief

Members of the commission had indicated clearly in both reports that some relief to the domestic industries was desirable.

A Canadian mining man disagrees with US producers' views. See article immediately below.

Any moves undertaken by the mining bloc in the direction of higher tariffs and amending the tariff commission law will have to be begun in the senate. It is almost a certainty that the house ways and means committee will take no action on these proposals this session and the bloc's hope is to attach them as a rider to some bill that has been passed by the house and is called up for consideration on the floor of the senate.

It is anticipated that bills carrying out the mining bloc's plans will be introduced in the senate within a few days. Whether they will adopt the proposed higher tariff rates on lead and zinc proposed by the minority members of the Tariff Commission is not known at this time because

—Continued on page 68

Dixon Is Booming And Ready for More

Reporting a record-smashing '59 to its stockholders this week, Dixon Chemical & Research, Inc., hints at expansion and diversification plans that should have old-line competitors manning the bulwarks.

Sulfuric acid up-grading, says the six-year old firm, looms large in its corporate future. Initial phase of this long-range program—construction of a $1.5 million aluminum sulfate plant in Newark, N. J.—has already been completed. Set to go on stream this month, the unit will consume some 20,000 tons of sulfuric per year.

At Paulsboro, N. J., Dixon Chemical In-

—Continued on page 42

US Lead, Zinc People Seen Harming Themselves

Lead and zinc makers are doing themselves more harm than good by urging protectionist policies on the government, says a top Canadian mining executive.

Citing a lag in lead and zinc consumption behind that of substitute materials, R. Hendricks has called on the American Zinc Institute and the Lead Industries Association to adopt policies backing international cooperation among producers

—Continued on page 68

Chemical Firms Find Congress Making Patent Situation Easier For Research in Outer Space

Congress is taking steps to sweeten the pot for chemical firms and others participating in the nation's costly outer space research projects. Acting on joint recommendations from industry and the National Aeronautics & Space Administration, the house science and astronautics committee has just approved a measure that would permit industry—and this includes many of the big chemical companies—to retain some of the patent rights it is now forced to turn over to the government. Passage of the measure by congress would lure in many firms that have been shying away from the projects, Washington observers say.

The current patent section of the law provides that any invention made under a contract with the National Aeronautics & Space Administration "shall be the exclusive property of the United States."

'Significant Utility' a Factor

It further provides that no patent may be issued to any person if the invention involved appears to the Commissioner of Patents to have "significant utility" for the space program unless the applicant swears under oath that he developed his invention without federal aid.

Even then, the applicant may be overridden by the NASA administrator and/or compelled to find any remedy due him through appeal procedures. Government rights in inventions may be waived if the administrator can show that "the interests of the United States will be served thereby."

NASA proposed to strike out the existing provision of the law and substitute for it an administration provision which would place in the administrator discretion for acquiring title to inventions produced under NASA contracts.

In making his decision, the administrator would be required to "protect the public interest and the equities of the contractor." He could, in cases where the contract provided for title rights in the government, waive such rights. He would have authority to bring prior contracts into conformance with such new policies as might be promulgated through the waiver process.

In essence, the committee proposal is the NASA proposal with certain amendments. The major changes are these:

• The committee added a provision which would require the NASA administrator in all research and development contracts to obtain for government use not less than a royalty-free, irrevocable

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MANAGER: Dr. Robert H. Elkins, added to the executive staff of Nalco Chemical Company, Chicago, as manager of corporate research. He has had experience with Standard Oil Company of Ohio, Great Lakes Carbon Company and Sinclair Research Laboratories.

Senate Finance Committee Okays Three Chemical Bills

The senate finance committee has given approval to three bills in the chemical field passed previously by the house and now awaiting final clearance before being sent to the President for his signature. They are:

HR 8649 to continue for three years the suspension of the tax on the first domestic processing of coconut oil, palm oil and palm kernel oil.

HR 9820 to extend for three years the period of free importation of certain tanning extracts, which were temporarily placed on the free list three years ago.

HR 9307 to continue the suspension of import duties on alumina and bauxite for two additional years. This bill contains a rider suspending the duty on crude chicory an additional two years.

The bills were placed on the senate calendar to be called up for passage at a later date.

Monsanto Has Plans For Cellulose Acetate

Monsanto Chemical Company did more than exhibit its wares at last week's annual National Packaging Exposition in Atlantic City, N.J. The St. Louis, Mo., company took the occasion to announce plans for increasing cellulose acetate sheeting capacity by 20 percent.

New facilities will be constructed at the company's Springfield, Mass., plastics division plant.

The increase in manufacturing potential, said a spokesman for Monsanto, is the result of increased demands for semi-rigid transparent acetate packaging material. The Monsanto brand is tradenamed "VuePak."

Recent developments in high-speed, box-forming equipment are said to have spurred this demand.

Chief among outlets for cellulose acetate sheeting are semi-rigid boxes, used for packaging flowers, soft goods, candy

—Continued on page 71

Enzymes of Takamine Get Go-Ahead for Use in Feeds

Food & Drug Administration has given the go-ahead for the production and sale of Miles Chemical Company's Takamine enzymes for use in non-medicated livestock and poultry feeds.

FDA ruled that specified enzyme products which are offered for use in non-medicated animal foods are not food additives within the meaning of the food additives amendment of 1958.

P. A.'s See Paradox: Business 'Good,' 'Disappointing'

This month we continue the paradoxical situation in which "good business" is producing a number of disappointments. Production is good and new orders are being booked in satisfactory volume, but they are not meeting the over-optimistic goals established by many companies and industries.

A number of our members attribute 1960's slow start to the poor weather conditions that have prevailed over most of the nation. Others feel that year-end objectives were set too high. There is general agreement that business for the immediate months ahead will be good, but not booming. In this respect, our members agree with those economists who are predicting a "leveling" or "plateau" period.

New orders strengthened slightly after last month's drop. March shows 30 percent reporting improvement, 45 percent at the same level and 25 percent reporting declines. Production, on the other hand, slowed somewhat this month. While 26 percent did report higher production, 23 percent (last month it was 13 percent) tell of lower output and 51 percent report no change.

Almost all materials are readily available, and this has served to keep prices in check and to lead purchasing executives to shorten their forward commitment time.

Employment is down slightly from last month.

There is a general reluctance on the part of purchasing executives to add to inventory. Our special question this month sought to determine the reasons for this reluctance. The major factors, in the order of their importance, seem to be the ready availability of all materials, the belief that prices will not rise much in the months ahead and the fact that purchasing executives and other top management are more aware than ever of the high cost of carrying material in stock.

Again this month, there is little change

—Continued on page 42

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

Pitts. Coke Changes Cement Unit's Status

Pittsburgh Coke & Chemical Company has changed the status of its Green Bag Cement Division to that of a wholly-owned subsidiary. Louis R. Forbrich has been named vice-president of the unit and will continue as its general manager.

A sharper focusing of management's attention on needs of the cement market will be made possible by the changed status, a spokesman for the Pittsburgh, Pa., company states.

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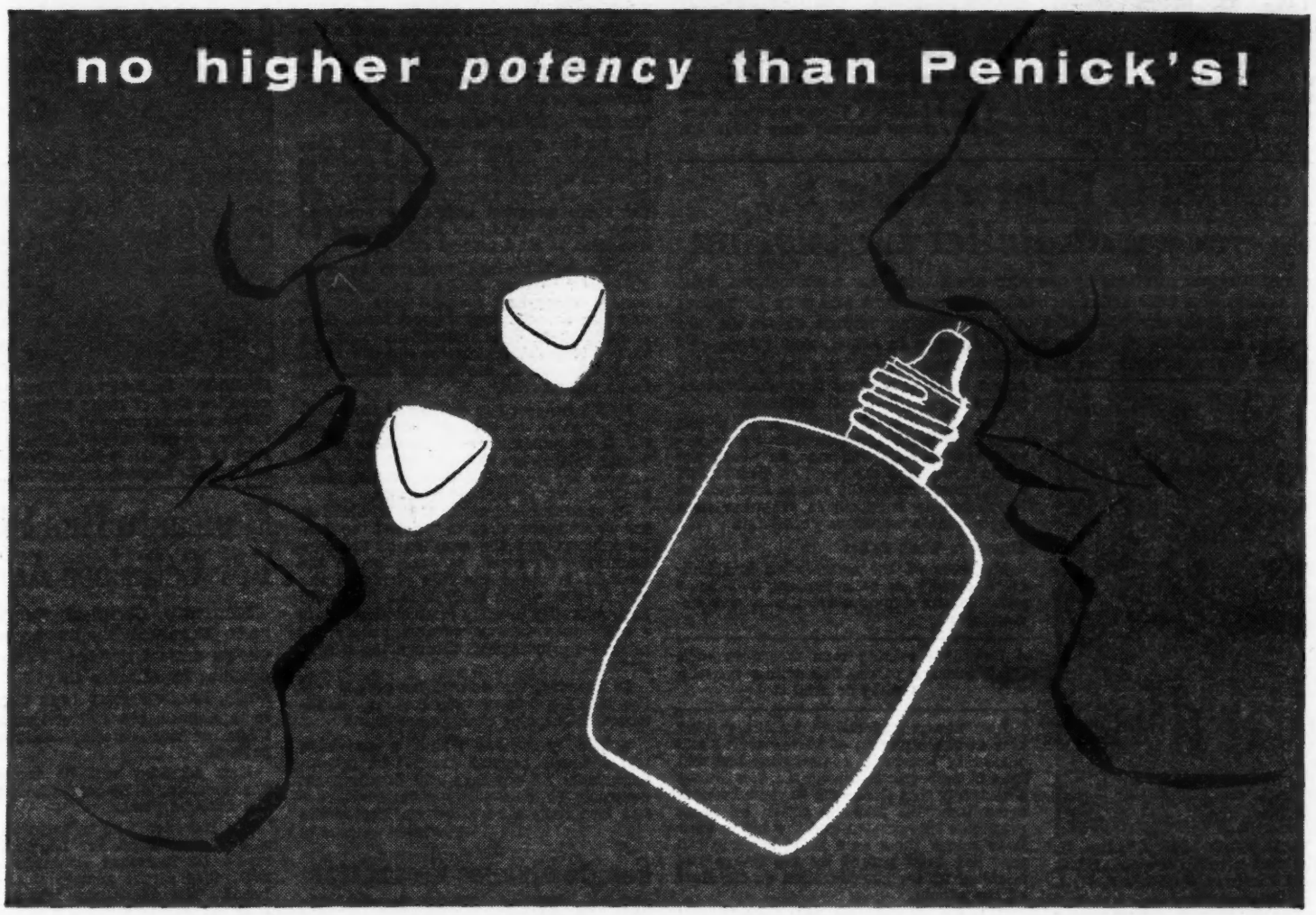

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IN SALES POST: Thomas E. Shaffer, appointed district sales manager of the northeast and eastern drug districts by McKesson & Robbins, Inc., New York. He had been sales manager of the Omaha drug division.

Polyethylene Business Bubbles Merrily Along

Bubbling with new developments, the polyethylene field is featuring the start-up of two new plants by Dow Chemical Company and the formal introduction of scented packaging materials by US Industrial Chemicals Company.

Start-up of the Dow units—one at Findlay, Ohio, the other 2,000 miles away at Fresno, Calif.—is setting the stage for expanded distribution of polyethylene resins, according to the Midland, Mich., company.

The Findlay plant is set to serve the midwest and east, while output from the Fresno unit moves to western markets. Heading the latter facility is Robert W. Van Sickle, formerly chief of Dow plastics technical service operations at Freeport, Tex. William B. Sander, former president of Extruders, Inc., has been named manager of the Fresno unit.

Expansion in the field, says Dow, goes ahead on the strength of industry estimates that total polyethylene film sales will soar to some 650 million pounds by 1965—more than double the 1959 figure.

Dow's film varies in thickness from 0.5 mil to 10 mils and comes in a variety of widths, the company reports.

New York-based USI, a division of National Distillers & Chemical Corporation, used the National Packaging Exposition in Atlantic City, N.J., last week to give

—Continued on page 42

Monsanto SA Subsidiary Starts Up Plastics Output

Monsanto Overseas SA reports start-up of plastics production at two Argentine facilities in which it holds a controlling interest. A plant at Zarate has commenced production of polyvinyl chloride plastic compounds, and one at Mendoza has started turning out both PVC and vinyl chloride monomer.

The former facility is owned by Monsanto Argentina SAIC, a wholly-owned subsidiary of Monsanto Overseas, which in turn is owned by Monsanto Chemical Company, of St. Louis, Mo.

Oxygen Breaks Are Tabooed, Says Linde, Even If It Is Okay To Break for Coffee, Aspirin

Coffee breaks are standard practice today, aspirin breaks are an interesting innovation (see page 3), but oxygen breaks, says Linde Company, are just out of the question. Promotion of "Lif-O-Gen" oxygen inhalants, the Union Carbide Corporation division adds, is not aimed at gathering in a bonanza via panacea. Misguided and unauthorized publicity for these inhalants, the company explains, has been thumping them as a sure-cure for hangover and other common distempers such as that "tired run-down feeling."

Now, in a policy statement to the press and other communications people, Linde is throwing its coporate weight firmly against all such claims.

Oxygen No 'Miracle' Cure

"We have no evidence," the company states, "that oxygen is a 'miracle' cure for hangover, fatigue, headache, etc." In fact, "it is not a completely benign agent and, as is true of any other medication, it has contra indications and can be administered in concentrations and over periods of time in excess of the patient's tolerance.

Linde's inhalant has been designed to be used by laymen only as an emergency measure. In respect to long-range therapy, the firm notes that it has "worked closely for thirty years with the medical profession toward the development of oxygen therapy as a measure to be used by and under the guidance of doctors."

This policy rules out self-administered daily doses and casts a dark frown on anyone who thinks an inhalant can be used as handily as an old-fashioned flask for a quick pick-up.

Prompting Linde to clarify its position were several items in the public press, at least one magazine article, and references made on several network television programs, in which pure oxygen was recommended for relief of minor ills.

Reference was made to "Lif-O-Gen" as a convenient source of oxygen with Linde specifically named as a distributor of the inhalant. Fearing the implication that it subscribes to such views, the New York

—Continued on page 71

Stauffer Revamps in Sales, Picks Product Managers

Stauffer Chemical Company has reorganized its industrial chemical sales department to bring its functioning into line with new marketing requirements.

Chief innovation in the New York company's resulting set-up is establishment of a national product manager for each group of products.

Charles Loring has been named national manager of boron and aluminum chemicals, carbon disulfide, chlorinated solvents, hydrofluoric acid, hydrogen chloride, sodium hydrosulfide and sulfurs. Joseph P. Madden will be in charge of various alkalis, and E. L. Beattie, retaining his post of midwest sales manager, will look after sulfuric acid in locations not served by the company's consolidated chemical division.

In a related development, Stauffer has named Joseph F. Luther to the post of eastern sales manager of industrial chemicals, and L. Hunt Myers to that of manager of the technical service department in the industrial chemicals division.

PRODUCTS MANAGER: Harold A. Ford, appointed manager of nitrogen products by the chemicals division of Olin Mathieson Chemical Corporation. His office will be at the division's headquarters in Baltimore, Md.

Antioxidant Capacity Up Sharply at Catalin

Catalin Corporation of America has completed a 40 percent expansion of antioxidant capacity, raising its productive potential to some 6 million pounds per year. Principal products sharing in the boost are butylated hydroxy toluene, trade-named "CAO-3," and 2,6-ditertiary-butyl-p-cresol, or "CAO-1."

The company's Fords, N. J., plant, scene of the expansion, now has, as a result of the program, improved production efficiency and extra assurances of maintaining high product purity, Catalin states.

"CAO-3" is marketed to makers of food products to combat rancidity, loss of nutritive values, discoloration and other deterioration stemming from oxididation.

"CAO-1," Catalin says, finds major applications as an additive to aircraft and automotive gasoline jet fuel, other oil and petroleum products, and in rubber.

Gaetjens Acquires Firm

Gaetjens, Berger & Wirth, Inc., Brooklyn, N. Y., has acquired Camden Ink & Color Company, Camden, N. J. The company will operate under the name of GBW Color Company and will be under the supervision of Fred W. Hess, jr.

Polio Vaccine Has One Need: Shot in the Arm

What the polio vaccine situation needs is a shot in the arm, and it also needs a doctor to administer the shot. Such a man is Dr. Leroy E. Burney, Surgeon General of the Public Health Service, who has just come up with a survey system he is willing to inject into individual communities so that their leaders can root out the persons who still require polio protection.

The system, provided to all interested communities without charge, makes it possible to complete a thorough survey within a few days, Dr. Burney reports.

Facts for the Unvaccinated

The country's 90 million unvaccinated citizens, after being uncovered individually by the surveys, will be filled in on the following facts, if communities respond to the Surgeon General's appeal:

- Polio vaccine is most effective if used before the disease is prevalent; "the sooner you get vaccinated, the greater will be the protection."
- Vaccine manufacture takes about four months; if demand is low now, supplies are likely to be low in the summer, as present stocks may be outdated by then.
- It is the third shot, due seven or more months after the first two that the gives the greatest protection. A fourth shot, a year after the third, adds even greater protection.

Supplies of unused polio vaccine have reached a high of 26.4 million doses.

This figure, PHS notes, follows the normal but unhealthy vaccine supply picture of "long in spring, short in summer."

The perils inherent in public complacency, Dr. Burney points out, can be seen in the fact that most polio epidemics now start in neighborhoods where there are concentrations of unvaccinated people. But the victims in these neighborhoods, he adds, are usually infants and children under five years old, rather than the unvaccinated adults.

About five million children in this age group have not had polio shots and another five million have had only one or two injections, according to PHS records.

"Thus," comments Dr. Burney, "about half of the nation's youngest and most vulnerable children still lack optimium protection against a disease that may cripple them for life."

Farm Chemicals Cutoff For Tolerances Advanced

The deadline date when certain agricultural chemicals, covered by the recent amendment to the pesticide law with regard to growth regulators, nematocides, etc., must meet the tolerance requirements of that law was extended to March 6, 1961, for another group of such chemicals by the Food & Drug Administration last week.

Originally, these products would have had to be in compliance with the law by last March 6, but in order to give industry and the FDA more time to conduct research to determine proper tolerances, an additional year has been allowed.

The first list of products granted this

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Association Meetings

Air Pollution Control Association, annual meeting, Netherland-Hilton hotel, Cincinnati, Ohio, May 22-26.

American Chemical Society, national meeting, Cleveland, Ohio, April 11-14.

American Institute of Chemists, annual meeting, Radisson hotel, Minneapolis, Minn., May 12-14.

American Pharmaceutical Association, annual meeting, Shoreham hotel, Washington, D. C., August 14-20.

Animal Health Institute, annual meeting, Shoreham hotel, Washington, D. C., April 17-19.

Armed Forces Chemical Association, annual meeting, Sheraton-Park hotel, Washington, D. C., September 15-16.

Association of Consulting Chemists & Chemical Engineers, dinner and forum, Shelburne hotel, New York, April 19; annual meeting, Shelburne hotel, New York, October 25.

Association of Food & Drug Officials, annual conference, Baker hotel, Dallas, Tex., June 5-9.

Association of Southern Feed & Fertilizer Control Officials, annual meeting, Riverside hotel, Gatlinburg, Tenn., June 21-22.

Chemical Market Research Association, annual spring meeting, Biltmore hotel, New York, May 17-18; annual fall business meeting, Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 16-18.

Drug, Chemical & Allied Trades Association, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N Y., September 15-18.

Electrochemical Society, LaSalle hotel, Chicago, May 1-5.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-11.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronado, Calif., September 27-29.

National Foreign Trade Council, national meeting, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

National Petroleum Association, semi-annual meeting, Sheraton-Cleveland hotel, Cleveland, Ohio, April 20-22.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-15.

Parenteral Drug Association, scientific meetings, Warwick hotel, Philadelphia, April 29; Edgewater Beach hotel, Chicago, June 24; annual convention, Statler hotel, New York, October 19-21.

Pulp Bleaching Conference, sponsored by Technical Association of Pulp & Paper Industry, Edgewater Beach hotel, Chicago, June 14 to 16.

Society of the Plastics Industry, Canadian sectional conference, London hotel, London, Ont., April 25-26; national conference and annual meeting, cruise on the Queen of Bermuda, May 7-13.

Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-20.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, April 12.

Toilet Goods Association, scientific section, spring meeting, Waldorf-Astoria hotel, New York, May 11; annual meeting, Poland Spring House, Poland Spring, Maine, June 27-29.

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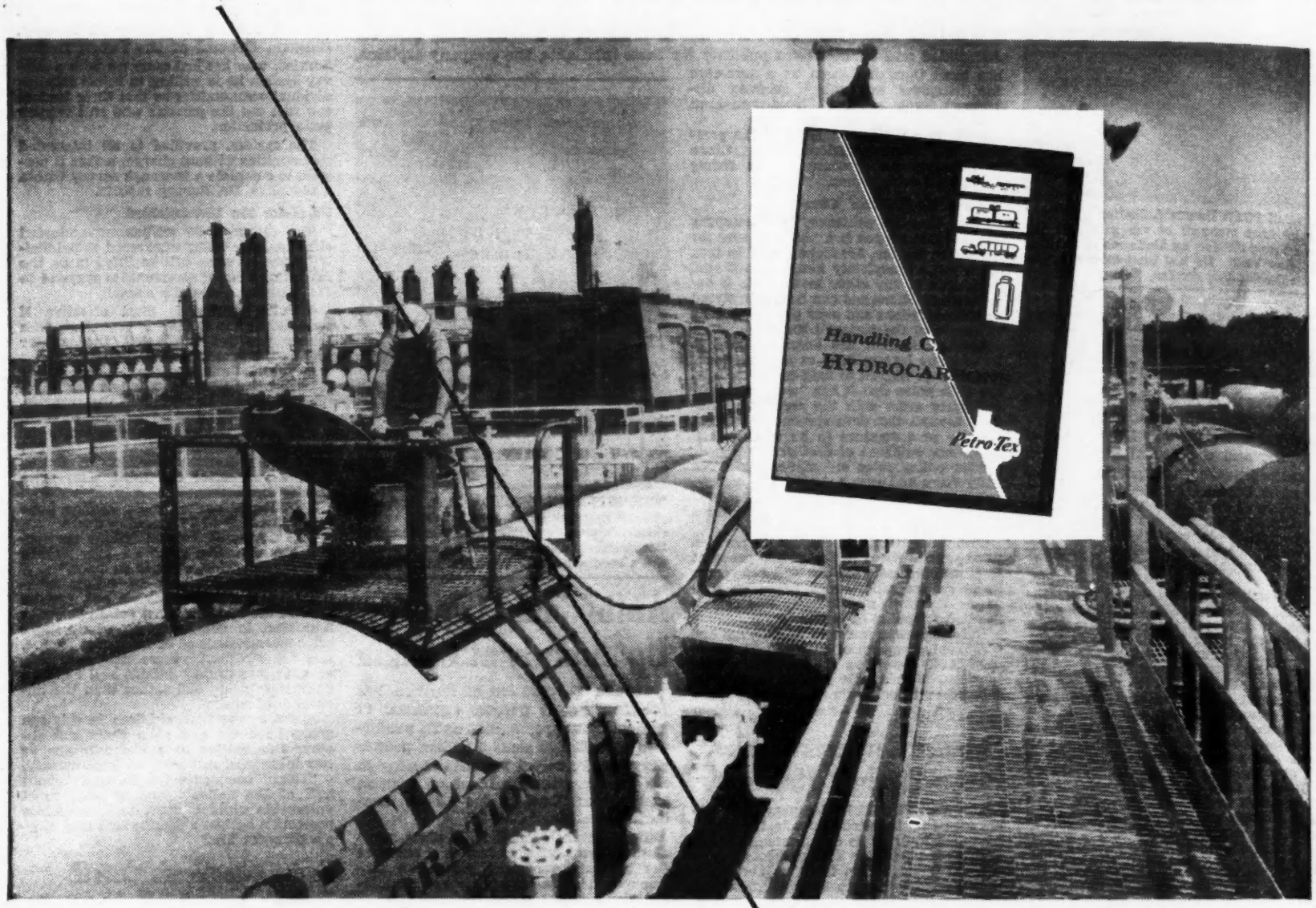

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A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		January 1960	January 1959
Acetic Acid, Synthetic	lbs.	37,046,168	56,854,385
Acetone	lbs.	60,806,765	55,211,257
Ammonia, Anhydrous	tons	396,403	337,973
Benzene	gals.	35,516,651	28,286,617
Chlorine	tons	385,253	331,374
Formaldehyde (37% basis)	lbs.	121,262,640	137,067,075
Methanol, Synthetic	lbs.	155,795,523	151,637,021
Phthalic Anhydride	lbs.	30,675,241	29,017,531
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	415,423	406,168
Sulfuric Acid (100% H_2SO_4)	tons	1,589,402	1,463,974

Sources: Tariff Commission, Bureau of Census

Teaching Chemistry

The chemical industry—and all other industries that have a need for any number of practical chemists or chemical technologists in their working staffs—should lose no time in getting fully informed on the project launched in California April 3 with the stated objective of "streamlining" the methods of teaching chemistry in high schools. The expectation of its sponsors is that the project — CHEM (Chemical Education Materials) study — may revolutionize such teaching methods, through the application to chemistry teaching of the "up-to-date" treatment that is said to have applied to physics teaching in more than six hundred high schools under a program devised by the physical science study committee at Massachusetts Institute of Technology.

The CHEM project is being jointly promoted by the University of California and Harvey Mudd College under a starting grant of $126,000 from the National Science Foundation, with a steering committee headed by a chancellor of the university who is a Nobel laureate in chemistry. It will, to some extent, parallel the purposes of Chemical Bond Approach project—also NSF-financed—but will use a different approach. It will start with a two-year plan, with, in large part, the objective of promotion of studies of atomic and molecular bonds as "the most important factor in determining the chemical make-up of substances." It plans to help high school chemistry teachers by providing them with "modern teaching aids that their school districts cannot afford."

Thus far, participants in the CHEM project are chemists and educators. If the undertaking is to do what it should in the equipping of chemistry students for practical technical service in the industrial economy, there must be industrial participation in its development and application. That should start now in the getting of adequate information on what is going to be done, when, and by whom. It may be useful in that connection to know that actual work on new textbooks and lecture experiments, including films, is scheduled to get under way at Harvey Mudd College in Claremont, California, in June and July at a conference which, it is expected, will be attended by between twenty and thirty college and high school teachers of chemistry. The national organizations of chemist-employing industries should be represented there, at least in the capacity of advisers on practical application, objectives and needs.

In any method for the teaching of chemistry at any stage, it is highly desirable, especially from a practical point of view, that the primary objective be proper training in the fundamentals of the science. Specialization, especially along what are called "modern lines," is a bit too "high" for a high school curriculum. In fact, it is, for the most part, something to be learned in industrial, rather than educational, institutions.

Progress on Cancer

About the same time that the Department of Agriculture was setting forth its differences with the Department of Health, Education & Welfare with respect to theories on the various problems presented under endeavors to deal successfully with the intentional or accidental introduction of carcinogenic substances into foods, noted in "Washington Talks It Over" last week, reports were published in the daily press on the seminars conducted by the American Cancer Society for discussion of recent advances in cancer research. Those reports were quite encouraging in what they disclose about discoveries in connection with the causes of cancer and experimental research in the development of vaccines with some measure of preventive effectiveness and at least some promise of curative application in leukemia. Doubtless the information will get increasing consideration for its pharmaceutical potentialities.

But, also about the same time, came the publication of the announcement by the federal government that it was going to pay something like ten million dollars to cranberry growers whose sales had been severely reduced in last year's peak season as a result of the pronouncement by the Food & Drug Administration that crops in several producing areas had been contaminated with an experimentally carcinogenic weed-killer. Those who are on the HEW side in the food additive controversy are, in this connection, asking the question which presents the biggest problem to dispensers of foods containing any sort of additive: What is the reason for using such stuff? There will be growling on the part of those who go after any governmental spending of millions for something with which they have no concern; although there is a bit of consolation for them in knowing that the cranberry compensation will not be given to growers whose berries were contaminated.

The cancer aspect is a most serious one, but it is only one of many presented by the question of why is a food additive. The report of the President's study group on the question as a whole is going to present topics for scores of discussions and arguments. The position of the Department of Agriculture with respect to legalistic flexibility giving due regard to "the best informed scientific and professional judgment" is prematurely optimistic. Discussing "Cranberry Smash" in the November 27, 1959, issue of *Science*, its official journal, the American Association for the Advancement of Science said: "The scientific issues are unresolved. Whether the [HEW] Secretary's position is extreme cannot be appraised until the evidence is out and expert opinion is brought to bear."

At the annual meeting of the association, its pharmacy section held a two-session symposium on "The Scientist's Part in Protection of the Public"—on food additives. It had been planned more than six months earlier.

Discussing the program of the house committee on interstate and foreign commerce for scientist panel hearings on food additives, the association, in *Science* for March 11, concluded: "These considerations and others too complex to be considered here will give the scientific panel a difficult job. We hope the panel will be able to suggest the most effective means of bringing scientific judgment to bear upon the provisions of the Delaney clause."

There was a disturbing note in the reports on the cancer seminars. It came in a statement that the chief of the environmental cancer section of the National Cancer Institute had "accused the government of muzzling his work on cancer in industrial plants in this country," and said that "many industries have refused to publish the results of their own studies of cancer hazards." He specifically named the dye and rubber chemical industries, metallic miners and processors, and petroleum companies as being careless of the dangers to their workers. Other members of the same panel, while admitting that cancer hazards were hushed up by some industrial companies, expressed the belief that the previous speaker had overstated the conditions and that there was a growing movement in all industries to project workers. It certainly is to be hoped and urged that every company will keep adequately informed on the possibilities of hazards in its operations and continuously do everything possible to prevent their development.

Washington Talks It Over

Chemical Leaders Are Keeping a Closer Eye on the Doings of Congress in These Closing Days, Even Though the Session Has Been Pretty Much of a 'Bust' for the Industry.

By Ralph L. Cherry
Washington Editor

From here on out, chemical industry observers in Washington will be keeping a weather eye on the doings of congress, for the time is fast approaching when the leadership will start clearing the desks for adjournment.

Congress has just about reached the half-way point of the session with a lot of "must" legislation still to be passed.

It is the hope of the leaders to adjourn the session in time for the Democratic National Convention July 11. It can be done by ditching a lot of bills of no political importance, and concentrating on those bills that have to be passed, such as appropriation bills, and measures calculated to pick up a few votes at election time next November.

So far the session has been pretty much of a "bust" for the chemical industry.

Out of several score bills in which the industry has a keen interest, not one of any significance has yet reached the White House. This is the way the picture shapes up with little more than two and a half months to go:

Antitrust—Senate committee is still cool to administration-backed bill for advance notification of mergers; the house committee shows no signs of favoring the senate-approved and administration-backed bill for subpoena of books in pretrial antitrust investigations.

Color—House committee can't make up its mind to support or modify the Delaney cancer clause. If action takes place, it will be at the tail-end of the session.

Labeling Hazardous Articles—A bill will receive final approval and most likely in the form industry wants. The chemical industry may have to accept an amendment permitting the Department of Health, Education & Welfare to extend its coverage to larger than ordinary household containers, if this is demed desirable.

Drugs—The Karsten narcotics bill has gone to the White House to be signed; HEW is still working on legislation broadening the record-keeping requirements for manufacturers of barbiturates and amphetamines.

Fair Trade—Legislation for federal enforcement of fair trade contracts appears dead.

Taxes—A watered-down Boggs bill for deferring taxes on foreign incomes may get through the house, but not the senate; legislation deferring taxes on stock distributions in antitrust cases depends on Supreme Court action on the governments appeal of the GM-duPont case.

If yours aren't here, maybe they should be

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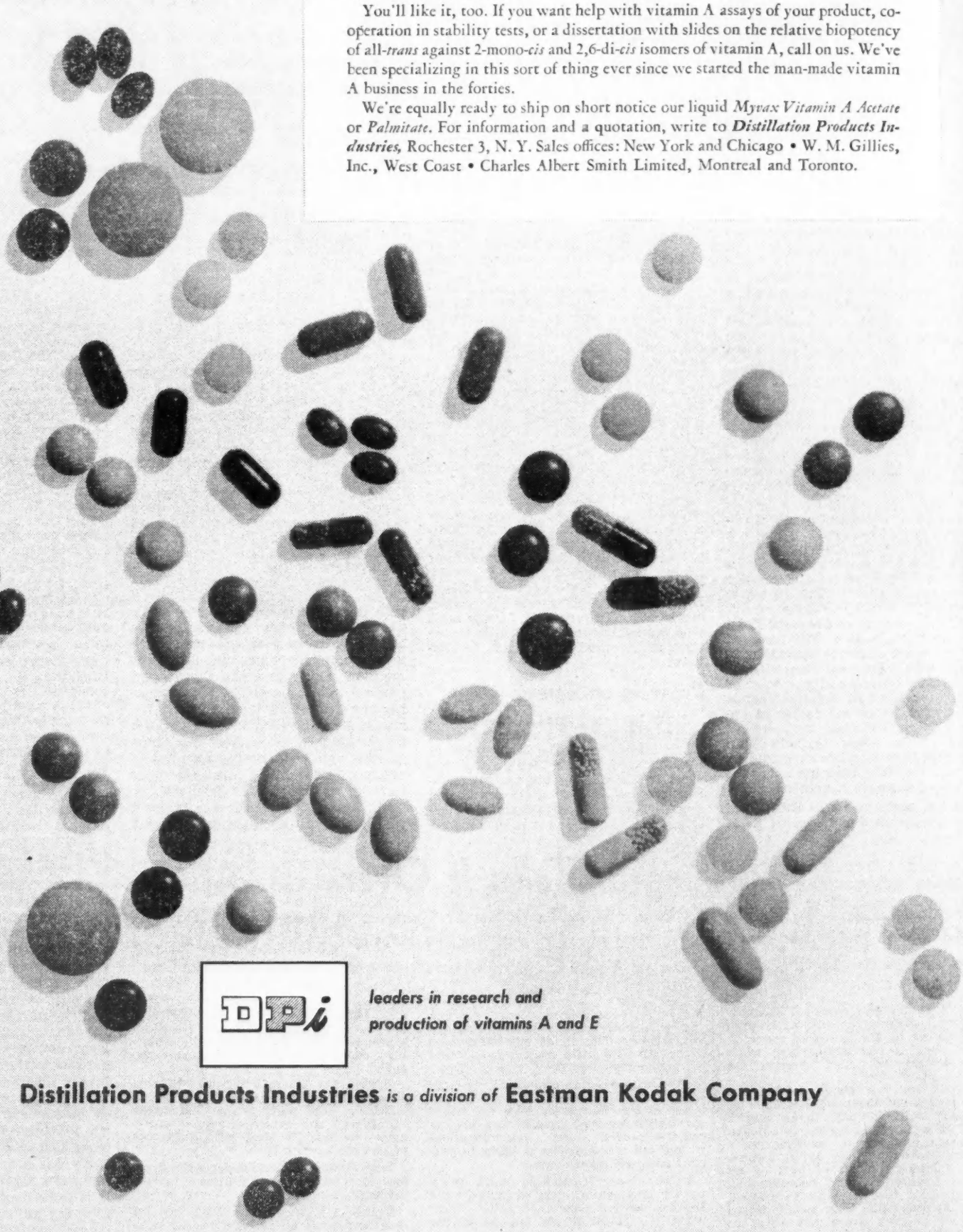

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and April 8 on large lots, f.o.b. New York, with the lowest the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acenaphthene below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., works lb. .41 - .50
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms., any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.22.00 -23.00
tech., dms., c.l. dlvd. 100 lbs.13.75 - —
dms., l.c.l., dlvd ..... 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd. ..... lb. .08½- —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 - —
dms., l.c.l., dlvd ..... lb. .36½- .37
tanks, dlvd. ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dms., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., smaller lots, same basis lb. 1.35 - 1.63
dms., 5,000-lb. lots, same basis lb. 1.30 - 1.45
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse ..... lb. .24½- .30
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt. lb. .63½- —
USP, standard, fine, cryst., gran., (20-40 mesh) powd., (80 mesh.) 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40¼- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works. lb. .51 - —
dms., l.c.l. works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld. lb. .57 - —
dms., l.c.l., l.t.l., frt. alld. lb. .58 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld. lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. lb. .32¼- —
bgs., l.c.l., dlvd. lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.40 - 2.50
powd., 30 mesh., fib., dms. lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd. lb. .99 - —
fib. dms., l.c.l., dlvd. lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld. lb. 6.50 - 6.55
2½% dms. frt. alld. lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. lb. .32½- —
dms., l.c.l., dlvd. lb. .34 - —
tanks, dlvd. lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructively—distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truckloads
t.w.	tankwagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .30 - .35
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .85 - —
Aloin, USP, bbls., dms., kgs. lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works. 100 lbs. 4.30 - —
Lump, dms., works. 100 lbs. 5.05 - —
Powd., dms., works. 100 lbs. 5.20 - —
USP, burnt., dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works. 100 lbs. 5.30 - —
Powd., dms., works. 100 lbs. 5.45 - —
USP, burnt., dms. lb. .20 - .21
USP, hydrous, dms. lb. .07¾- .08
Alum, potash-chrome, dms. lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works lb. .05½- .08¼
Aluminum acetate, basic soln., 24%, bbls., l.c.l. works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works lb. .16½- —
cryst., dms., c.l., works 100 lbs.21.00 - —
dms., l.c.l., works 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works lb. .0495- —
cbys., l.c.l., works lb. .0570- .1095
tanks, works 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works lb. .17¼- .19¼
bulk, c.l., basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb. lots, same basis lb. .039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. .049 - —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb. ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 3.4% Al, dms lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ton.88.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs. 5.75 - —
bgs., l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., 250-lb. dm lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400- lb. dms., 15,000-lbs. works. lb. 1.22 - —
400-lb. dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.68.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.68.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 0-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works, ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., l.t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., e.l., frt. alld. E. of Rockies lb. .18¼- .19
dms., l.c.l., same basis lb. .20 - .20¼
tanks, same basis lb. .16 - .16¼
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
ams., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
primary, dms., c.l., frt. alld. lb. .19¾- .20¼
dms., l.c.l., frt. alld. lb .21¼- .21¾
tanks, frt. alld. lb. .17¼- .17¾
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld. E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .73 - 1.08
Amyris oil, dms. lb. 1.65 - 2.05
Anethole, tech., dms. lb. .92 - 1.00
USP, cns., dms. lb. 1.12 - —
Angelica root, bls. lb. .50 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs. lb. .16 - —
Spanish, bgs. lb. .16½- —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .23 - .27
USP, powd., bbls. lb. .29 - .30
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 7.35 - —
dms., less than 100-kilos kilo.7.75 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
ex-whse, N. Y., N. J. ton.86.50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton.35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy. ton.20.00 - —

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YOU CAN DEPEND ON PUBLICKER...

FOR UNIFORM QUALITY
STEADY SUPPLY
PROMPT DELIVERY

ETHYL ALCOHOL
ETHYL ACETATE
BUTYL ALCOHOL
BUTYL ACETATE
ISOAMYL ALCOHOL
ACETONE
ACETALDEHYDE
ACETIC ACID
AMYL ACETATE
REFINED FUSEL OIL
N-BUTYL CHLORIDE

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Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 5.75 - 7.50
Atropine sulfate, USP, bots ..... oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. .... lb. .40 - —
bgs., ton lots, same basis ..... lb. .41 - —

B

Bacitracin, bulk, 1,000,000.000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs. lb. 1.25 - 1.35
Barberry root bark, bgs ..... lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l., t.l., frt. equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 - —
dms., l.c.l., l.t.l., frt. equald ton.285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l, same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ton.110.00 - —
Barytes, southern, off-color, bgs., mines ton.25.00 - —
95-75%, bgs., mines ton.25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.55.00 -55.25
paper bgs., ex whse., New York ton79.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, l.c.l., works, E ..... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. ..... lb. 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms lb. 2.35 - —
Bayberry wax, bgs ..... lb. .45 - .50
Beeswax, crude, African bgs. .... lb. .50 - .52
Brazilian, bgs. ..... lb. .55 - .56
Central American, bgs. ..... lb. .53 - —
Chilean, bgs. ..... lb. .56 - —
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. ..... lb. .24 - .26
Belladonna root, bls. ..... lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse. ton.95.20 - —
bgs., 1-ton lots, ex whse. ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse. ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works. lb. .44 - —
Benzaldehyde, NF, dms. ..... lb. .80 - 1.05
Tech., dms., c.l., t.l. ..... lb. .47 - —
dms., l.c.l. ..... lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa ..... gal. .34 - —
Birmingham district .. gal. .34 - —
Chicago district ..... gal. .34 - —
Cleveland district .... gal. .34 - —
Geneva, Utah ..... gal. .34 - —
Johnstown, Pa. ..... gal. .34 - —
Lackawanna, N. Y. .. gal. .34 - —
Lone Star, Tex. ..... gal. .34 - —
Lorain, Ohio ..... gal. .34 - —
Middletown, Ohio ..... gal. .34 - —
Mennequa, Colo. ..... gal. .34 - —
Philadelphia district ... gal. .34 - —
Pittsburgh district ... gal. .34 - —
Sparrows Point, Md. .. gal. .34 - —
Syracuse, N. Y. ..... gla. .34 - —
Terre Haute, Ind ..... gal. .34 - —
Youngstown, Ohio .... gal. .34 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .34 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0063- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis ..... lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. ..... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld. lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb lots, same basis lb. .43 - —
USP, bbls., dms., ton lots. lb. .48 - —
bbls., dms., 1,000-lb lots. lb. .50 - —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. ..... lb. .32 - —
Benzophenone, dms. ..... lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .21 - X
cbys., smaller lots, frt. equald. lb. .23 - X
Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 - X
cbys., l.c.l., same basis ..... lb. .23 - X
tanktrucks, dlvd. Metropolitan area. lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works. lb. .93 - 1.06
Benzyl acetate, f.f.c., cns., dms. lb. .58 - .79
Benzyl alcohol, NF, dms. ..... lb. .58 - .80
Tech., dms., dlvd. ..... lb. .47½- .65
Benzyl benzoate, USP, 40-lb. dms. lb. .62 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald. lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. .23½- .25½
tanktrucks, dlvd. Metropolitan area. lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. ..... lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns. ..... lb. 1.85 - 2.10
Benzyl isoeugenol, cns. ..... lb. 9.25 - —
Benzyl propionate, bots. ..... lb. 1.35 - 1.65
Benzyl salicylate, bots. ..... lb. 1.50 - 1.85
Benzylidine acetone, bots. ..... lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns. ..... lb. 56.50 - —
Berberine hydrochloride, bots. .... lb. 56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots. ..... gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. ..... lb. 1.50 - 1.90
Rectified, cns. ..... lb. 1.75 - 2.00
Bismuth chloride, jars ..... lb. 5.11 - —
Bismuth hydroxide, dms. ..... lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots. .... lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.08 - —
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm. lb. 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, fib. dms. .... lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.63 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld. lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis ..... lb. .31 - —
Blackberry root bark, bls. ..... lb. .50 - .55
Blanc fixe, direct process, bgs., c.l., works ton.145.00 - —
bgs., l.c.l., works ton.155.00 - —
bgs., l.c.l., New York whse ton.195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.50 - —
Bloodroot, bls. ..... lb. .90 - 1.00

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms. lb. 2.20 - 2.85
Peruvian, dms. ..... lb. 1.95 - 2.40
BON acid maroons, pure, bbls. lb. 1.75 - —
Resinated, bbls. ..... lb. 1.50 - —
Bone black, dms., l.c.l., frt. alld. lb. .2275- .2425
c.l., works ..... lb. .2075- .2225
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.80.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).

2-AMINO-2-METHYL-1-PROPANOL (AMP)
CSC's Economical Emulsifier

AMP AMP AMP CSC
AMP AMP AMP AMP
AMP AMP AMP AMP
AMP AMP AMP AMP
AMP AMP AMP AMP

AMP
the emulsifier* for
water-wax emulsions, cleaners and polishes, dressings, self-polishing floor waxes and emulsion-type paints
*as fatty acid soap

AMP
EFFICIENT intermediate in synthesis of
surface-active agents, detergents and vulcanization accelerators for rubber

CAN YOU EMPLOY THIS EXTRAORDINARY WORKER?

SPECIFICATIONS FOR CSC AMP

Neutral Equivalent	88.5-91.0
Color, APHA, max.	20
Water, by Wt., max.	0.8%
Distillation Range	156°C-177°C
below 161°C. max.	10%
above 168°C. max.	5%
Odor	Characteristic
Non-volatile Matter by Weight, max.	0.005%

VERSATILE
INTERMEDIATE
CSC
2-AMINO-2-METHYL-1-PROPANOL

SEE what kind of a job AMP can do for you

Write today for sample and technical literature

INDUSTRIAL CHEMICALS DEPARTMENT
COMMERCIAL SOLVENTS CORPORATION
260 MADISON AVE., NEW YORK 16, N.Y.
ATLANTA • BOSTON • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • KANSAS CITY
LOS ANGELES • NEW ORLEANS • NEWARK • NEW YORK • ST. LOUIS • SAN FRANCISCO
IN CANADA: McArthur Chemical Co. (1958) Ltd. Montreal • IN MEXICO: Comsolmex, S.A., Mexico 7, D.F.
CSC

Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.92.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton.83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 5.32 - —
bgs., smaller lots, same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton.43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 6.05 - —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton.58.00 - —
USP, powd., bgs., c.l., works, ton.54.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs.19.62 - —
bgs., smaller lots, same basis, 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works, ton.163.50 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs.11.05 - —
bgs., smaller lots, same basis, 100 lbs.12.30 -14.30
dms., c.l., works ton.188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs.12.30 - —
bgs., smaller lots, same basis 100 lbs.13.05 - —
gran., 99.9%, bgs., c.l., works, ton.112.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots, same basis, ton.174.25 - —
dms., c.l., works ton.137.00 - —
dms., ton lots, ex whse. New York or Chicago 100 lbs. 9.72 - —
dms., smaller lots, same basis 100 lbs.10.47 - —
bulk, c.l., works ton.106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago, 100 lbs. 8.85 - —
bgs., smaller lots, same basis 100 lbs.10.10 -12.10
dms., smaller lots, same basis 100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.35 - 5.70
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 - 1.75
Buchu leaves, bbls. lb. .70 - .75

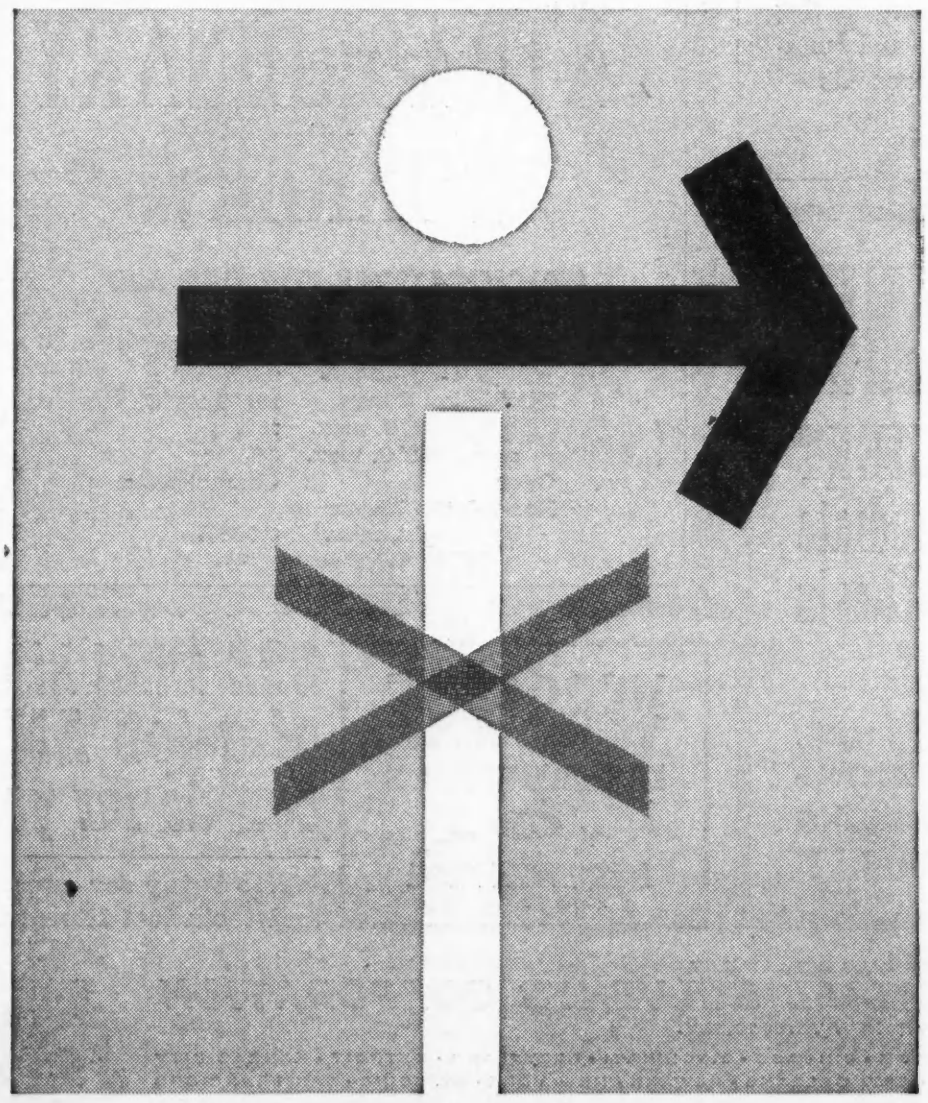
BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy. lb. .21 - —
cyls., l.c.l., refy. lb. .22 - —
tanks, dlvd. lb. .14½ - —
Butene-1, tanks, works lb. .0625- —
Butene-2, tanks, works lb. .0570- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .42½ - —
dms., l.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l., frt. alld lb. .19½ - —
tanks, frt. alld. lb. .15½ - —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., frt. alld lb. .19½ - —
tanks, dlvd. lb. .15½ - —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
Tert-synthetic, dms., c.l., frt. alld. dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼ - —
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ - —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. lb. 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb. .20½ - —
dms., l.c.l., l.t.l., f.o.b. works lb. .22 - —
tanks, dlvd. lb. .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½ - —
tanks, dlvd. lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .43 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies lb. 5.55 - —
Light shade, bbls., same basis lb. 4.65 - —
medium shade, bbls., same basis, lb. 5.30 - —
Medium light shade, bbls., same basis lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
Cadmium iodide, 25-lb. fib. dms. lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 - —
Red, light shade, bbls., same basis, lb. 1.72 - —
Red, medium shade, bbls., same basis lb. 1.87 - —
Red, medium light shade, bbls., same basis lb. 1.80 - —
Red, maroon shade, bbls., same basis lb. 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 - —
Orange, bbls., same basis lb. 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 - —
Red, dark shade, bbls., same basis, lb. 2.56 - —
Red, light shade, bbls., same basis, lb. 1.88 - —
Red, medium shade, bbls., same basis lb. 2.00 - —
Red, medium-light shade, bbls., same basis lb. 2.23 - —
Calmium-selenide lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.19 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native, cns. lb. 1.75 - 2.00
Redist., USP, cns. lb. 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots. lb.12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton.30.00 -38.50
bgs., l.c.l., works ton.45.00 -53.50
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 -53.00
surface treated, bgs., c.l., works, ton.42.00 -44.00
bgs., l.c.l., works ton.57.00 -59.00
ultrafine, bgs., c.l., works ton.117.50 -167.50
bgs., l.c.l., works ton.137.50 -187.50
Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald, ton.39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton.32.00 - —
Liquor, 40%, tanks, frt. equald, ton.12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 - —
Purif., gran., dms. lb. .27 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald, ton.36.00 -73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., dlvd lb. .37 - —



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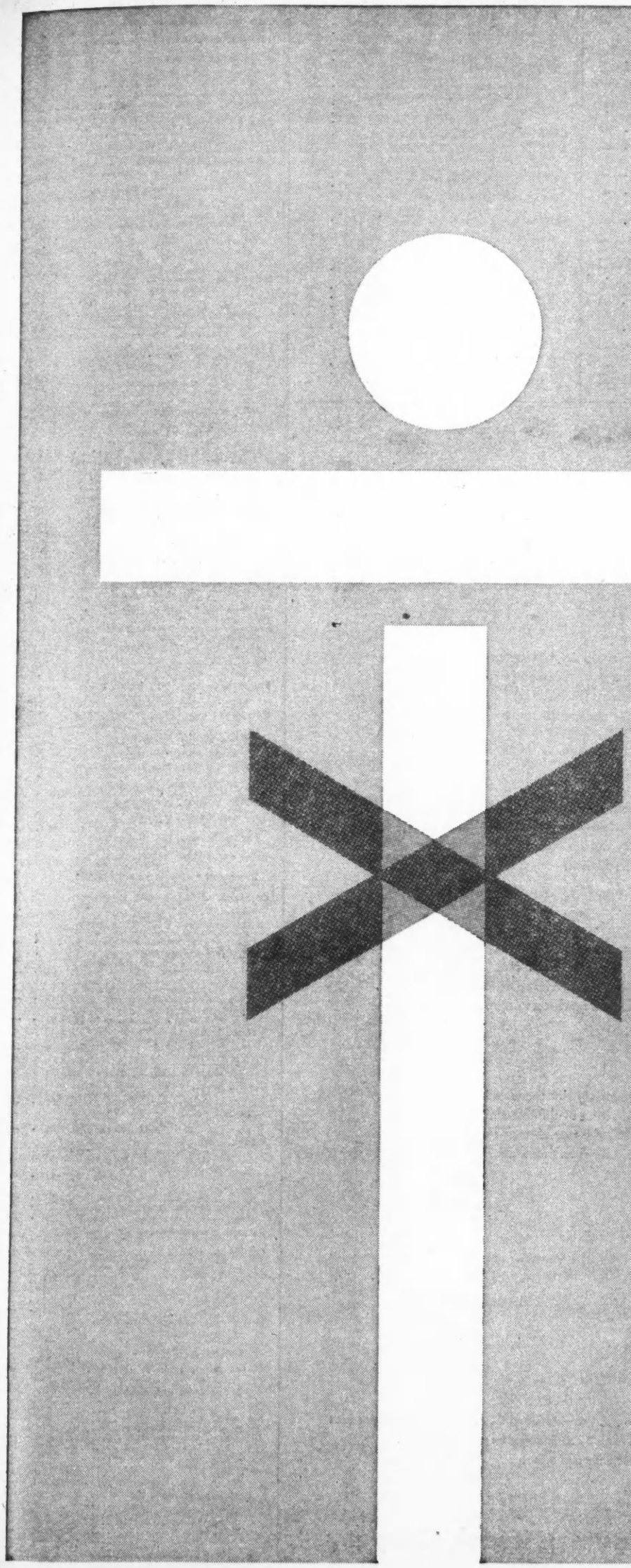
Mallinckrodt



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and meet them
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Today
we meet our standards-
tomorrow
we exceed them.
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it's a habit.

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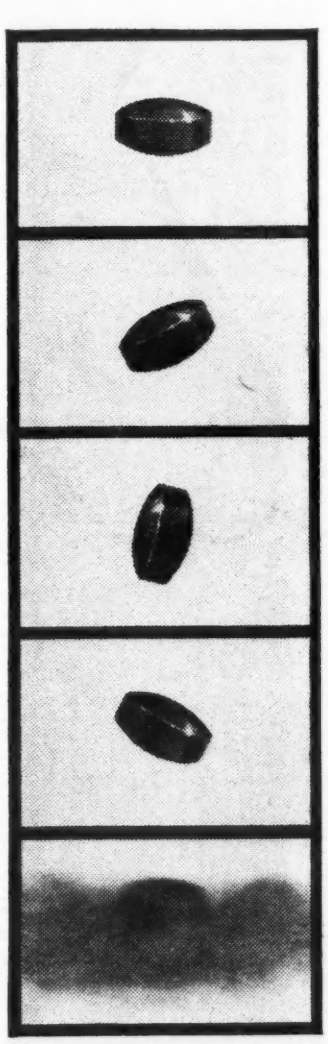
Calcium cyanide, dms., c.l., dlvd. E. of Rockies..lb. .20 - —
dms., l.c.l., same basis.....lb. .24 - .55
Calcium cyclamate, 100-lb. dms..lb. 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton..lb. .73½- —
USP, powd., 100-lb. dm., ton..lb. .66½- —
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies..cs.23.85 -25.60
100-lb. dms., same basis..dm.33.30 -36.55
Calcium hypophosphite, dms., 1,000-lb. lots..lb. 1.28 - —
Calcium iodide, jars.....lb. 4.52 - —
Calcium lactate, NF, dms., f.o.b. works..lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works..lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald..lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more..kilo.35.00 - —
Calcium para-aminosalicylate. (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms....lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald..100 lbs.16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald..ton.86.00 - —
bgs., c.l., t.l., f.o.b. Texas City works..ton.80.50 - —
bgs., l.c.l., frt. equald..ton.96.00 - —

Calcium phosphate, dibasic, feed grade, 21% P, bgs., c.l., t.l., frt. equald..ton.97.65 - —
bgs., l.c.l., frt. equald..ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald..100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs.10.00 - —
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y..lb. .39 - —
Calcium resinate, precip., dms., ton lots, frt. alld., works..lb. .40¼- —
Calcium silicate, hydrated, bgs., c.l., works..lb. .06 - —
bgs., l.c.l., works.....lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. .....lb. .39 - —
ctns., l.c.l. .....lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 5.42 - —
NF, mild, precip., dms., 100-lbs., f.o.b. works..lb. 5.67 - —
Camphene, 46° m.p., dms. incl., c.l., works..lb. .15 - —
dms. incl., l.c.l., same basis..lb. .16½- —
tanks, same basis .....lb. .12½- —

Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs..lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz. cs. .....lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots..lb. .59 - —
Syn., tech., 1 bbl. or more....lb. .48 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots..lb. .60 - —
bbls., smaller lots .....lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns., 500-lb. lots .....lb. .86 - —
ctns., smaller lots .....lb. .87 - —
Camphor oil, sassafrassy, dms. ..lb. .35 - .55
White, dms. .....lb. .26 - .30
Cananga oil, native, cns. .....lb. 5.00 - 6.50
Rectified, cns. .....lb. 7.25 -10.00
Candelilla wax, crude, bgs. .....lb. .68 - .70
Refd., pure, bgs. .....lb. .70 - .71
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. .....lb. 1.00 - —
powd., bgs. .....lb. 1.15 - —
Russian, bgs. .....lb. 2.00 - 2.15
powd., bgs. .....lb. 2.15 - 2.30
Capric acid, dms. .....lb. .35½- .38
tanks .....lb. .33 - .34½
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works..lb. .52 - —
bgs., l.c.l., l.t.l., same basis..lb. .57 - —
tanks, same basis .....lb. .49 - —
Capryl alcohol, 85% dms., c.l., t.l., works..lb. .19 - —
dms., l.t.l., same basis.....lb. .19½- —
tanks, frt. equald. .....lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works..lb. .22 - —
dms., l.c.l., f.o.b. works....lb. .23 - —
tanks, f.o.b. works.....lb. .19½- —

Caprylic acid, dms. .....lb. .35½- .38
tanks .....lb. .33 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms..lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms. .....lb. 3.15 - 3.40
Caraway seed, Danish, bgs. .....lb. .16 - —
Dutch, bgs. .....lb. .17½- —
Polish, bgs. .....lb. .17¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works .....lb. .08½- —
bgs., l.c.l., works .....lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works..lb. .06¾- —
ctns., l.c.l., whse. .....lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works .....lb. .07¾- —
bgs., l.c.l., dlvd. or whse..lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. .....lb. .13 - —
semi-reinforcing, bgs., c.l., works..lb. .05¾- —
bgs., ctns., l.c.l., whse. ...lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works. lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works..lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E..ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E..ton.55.00 - —
Solid, bulk, wholesale, works..ton.85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points..lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis..lb. .161 - —
tanks, dlvd. .....lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. .....lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld..lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld..lb. .14¼- —
tanks, frt. alld .....lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works..lb. 4.00 - 4.25
dms., smaller lots, works....lb. 4.10 - 4.75
Cardamom oil, NF, bots. .....lb.39.00 -42.00
Cardamom seed, bleached "A"..lb. 3.20 - —
Bleached "B" .....lb. 3.10 - —
Decorticated Alleppey, cs. ....lb. 2.30 - —
Guatemala, cs. .....lb. 3.15 - —
Green, Alleppey, bgs. .....lb. 2.35 - —
Ceylon, bgs. .....lb.. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. ....lb.16.80 - —
bulk, smaller lots, dlvd. ....lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots..lb. .70 Nom.
North Country, No. 2, crude, bgs., ton lots..lb. .80 Nom.
refd., pure, ton lots .....lb. .86 - .87
North Country, No. 3, Ceara, ton lots..lb. .73 - .75
Ceara, refd., pure, bgs., ton lots..lb. .83 - .84
North country, No. 3, Parnahyba, ton lots..lb. .74 - .76
Parnahyba, refd., pure, bgs., ton lots..lb. .84 - .85
North Country, No. 1, Ceara, yellow, bgs., ton lots..lb. 1.05 - 1.07
Parnahyba, yellow, bgs., ton lots..lb. 1.08 - 1.10
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd. gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works..million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, sea..l solid suspension, 400,000 A units per gram, cns..kilo.57.60 - —
Liquid in vegetable oil, 500,000 A units per gram, cns.kilo.72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo.240.00 - —
Carvol, bots. .....lb. 5.00 - 5.40
Cascara sagrada bark, bulk .....lb. .34 - .36
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works..lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works..lb. .64 - —
Imp., inedible, acid-precip., grs., Argentine, bgs., c.l., ex-dock, Eastern seaports.lb. .18¾- .19
New Zealand, bgs., c.l., same basis..lb. .24 - —
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J.lb. .22 - —
dms., ton lots, same basis....lb. .23 - —
dms., ton lots, same basis..lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis..lb. 1.44 - 1.75
Cassia oil, redist., USP, cns. ....lb. 8.50 -11.00
Cassia, Padang, "A," bls. .....lb. .30 - —
"B," bls. .....lb. .29 - —
"C," bls. .....lb. .28 - —
Korintje "A," bls. .....lb. .34 - —
"B," bls. .....lb. .30 - —
"C," bls. .....lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. .....lb. .2650- —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. .....lb. .2850- —
tanks .....lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. .....lb. .2660- —
tanks .....lb. .2360- —
hydrogenated, bgs., c.l. .....lb. .2450- —
bgs., ton lots .....lb. .2850- —
bgs., l.c.l., dlvd. .....lb. .3050- —
No. 1, AA, dms., c.l. .....lb. .2150- —
dms., l.c.l. .....lb. .2300- —
tanks .....lb. .2000- —
No. 3, tech., dms., c.l. .....lb. .2075- —
Refd., deod., dms., c.l. .....lb. .2650- —
dms., l.c.l. .....lb. .2750- —
Refd., deod., dms., c.l. .....lb. .2650- —
dms., l.c.l. .....lb. .2750- —
USP, dms., c.l. .....lb. .2350- —
dms., l.c.l. .....lb. .2450- —
tanks .....lb. .2150- —
Imported, No. 1, Braz., tanks..lb. .17¾- —
Sulfonated, 50%, dms., works..lb. .15 - .15½
75%, dms., works .....lb. .19 - .19½



The coating is crucial

Here is a medicament that must pass through the stomach and dissolve swiftly in the small intestine. The coating is a crucial matter.

It must be easy to apply by conventional means, soluble in organic solvents. It must provide a uniform skin of controllable thickness, must dry quickly without pinholes, and must resist abrasion in tumbling.

The film-forming substance that does these things is *Eastman C-A-P Cellulose Acetate Phthalate*. It performs predictably during coating and in the alimentary tract of the patient.

It steadfastly resists chemical action of the gastric juices and erosion from stomach motion. Tablets coated with *C-A-P* have shown no deterioration after seven days of continuous agitation in artificial gastric juice.

It disintegrates promptly in the small intestine, through hydrolytic action of the intestinal esterases. It works regardless of the rate of stomach emptying, and whether the intestinal environment is acid, alkaline, or neutral.

Eastman C-A-P Cellulose Acetate Phthalate is now available without patent license. For data, prices, and help on specific coating problems, write to ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

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DPi

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Castor oil acids, dehydrated, dms.	lb.	.44¼-	.46¼
Split, dms.	lb.	.37¼-	.38¼
Castor pomace, bgs., c.l., works	ton.	35.00	- —
Castoreum nat., cns.	lb.	5.25	- —
Syn., cns.	lb.	9.00	- —
Catechol, CP, eryst., fib., dms., works	lb.	2.17½-	—
Resub., dms., works	lb.	4.29½-	—
Catnip leaves, Southern, bls.	lb.	Nominal.	
Caustic potash (see Potash caustic).			
Caustic soda (see Soda, caustic).			
Cedarleaf oil, USP XIII cns., dms.	lb.	2.50	- 3.10
Cedarwood oil, cns., dms.	lb.	.65	- .70
Celery seed, French, bgs.	lb.	.33	- —
Indian, bgs.	lb.	.19	- —
Cellulose acetate, flake, powd., bgs., t.l., dlvd. E	lb.	.36	- .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	- .555
27% butyryl content, bgs., dlvd. E	lb.	.595	- .605
38% butyryl content, bgs., dlvd. E	lb.	.545	- .555
38% butyryl content, half-second, bgs., dlvd. E	lb.	.545	- .555
50% butyryl content, bgs., dlvd. E	lb.	.585	- .595
Cellulose gum, methyl (see Methyl Cellulose).			
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more works, frt. alld	lb.	.57	- —
bgs., smaller lots, same basis	lb.	.59	- —
Cerium chloride (see Rare Earth Chloride).			
Cerium chloride, 46%, dms., dlvd	lb.	.25	- —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more	lb.	1.40	- —
77% CeO, fib. dms., 100-lb. lots or more	lb.	1.74	- —
Cerium oxalate (see Rare earth oxalate).			
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd.	lb.	1.85	- 1.90
bgs., smaller lots, dlvd.	lb.	2.15	- —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E	lb.	.41½-	—
fib. cns., l.c.l., same basis	lb.	.43½-	—
tanks, same basis	lb.	.39	- —
Extra, cns., c.l., t.l., dlvd. E	lb.	.48½-	—
fib. cns., l.c.l., same basis	lb.	.50½-	—
tanks, same basis	lb.	.46	- —
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, bls	lb.	1.10	- —
Roman, cs.	lb.	1.50	- 1.75
Chamomile oil, blue Hungarian, bots	lb.	35.00	- —
Charcoal, activated, NF, fib. dms., c.l., works	lb.	.25	- .32
fib. dms., 5-ton lots, works	lb.	.26½-	.32½
fib. dms., smaller lots, works	lb.	.27	- .50
Charcoal, black (see Charcoal, activated).			
Charcoal, bone (see Bone black).			
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant	ton.	55.00	- —
briquets, bulk, c.l., f.o.b. plant	ton.	78.00	-80.00
5-lb. paper bgs., c.l., same basis	ton.	106.00	- —
25-lb. paper bgs., c.l., f.o.b. plant	ton.	87.00	- —
40-lb. paper bgs. c.l., same basis	ton.	84.00	- —
Chenopodium oil, NF, cns.	lb.	4.15	- 5.00
Chicago acid, paste, bbls., frt. alld.	lb.	3.21	- —
Chinawood oil (see Tung oil).			
Chloral, tech., 94% min., dms., c.l., works	lb.	.43	- —
dms., l.c.l., works	lb.	.91	- —
tanks, multiple units, 5 cars, dms., l.c.l., works	lb.	.21	- —
Chloral hydrate, USP, jars, 1,000-lb. lots	lb.	1.00	- —
jars, 500-lb. lots	lb.	1.03	- —
jars, 100-lb. lots or less	lb.	1.05	- —
Chlordan, agricultural, dms., c.l., frt. alld	lb.	.65	- —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld	lb.	.68	- —
Clarified, dms., c.l., frt. alld	lb.	.69	- —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld	lb.	.70	- —
Chlorinated paraffin, 42%, dms., c.l., frt. alld	lb.	.16¾-	—
dms., l.c.l., 10 dms. or more, same basis	lb.	.17¼-	—
70%, dms., c.l., same basis	lb.	.18½-	—
dms., l.c.l., 10 dms. or more, same basis	lb.	.19½-	—
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.60	- —
ctns., l.c.l., works	lb.	.61	- —
125, 1,000 cps., ctns., c.l., works.	lb.	.70	- —
ctns., l.c.l., works	lb.	.71	- —
Chlorine, liq., cyls., c.l., works, frt. equald	lb.	.11	- —
cyls., l.c.l., Metropolitan area	lb.	.12½-	.13¾
tanks, single units, works, frt. equald 100 lbs.		3.25	- —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs.		4.15	- —
tanks, multiple units, 4 cars, same basis 100 lbs.		4.35	- —
tanks, multiple units, 2 cars, same basis 100 lbs.		5.35	- 5.85
tanks, multiple units, 1 car, same basis⅝ 100 lbs.		6.25	- 7.25
Chloroacetic acid, mono, flake, 99% purif., dms., c.l	lb.	.23½-	.25½
dms., l.c.l.	lb.	.24½-	—
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald	lb.	.20	- —
frt. equald	lb.	.19	- —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld	lb.	1.03	- —
4-Chloro-2-aminotoluene, fused, bbls.	lb.	1.38	- —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld	lb.	.66	- —
m-Chloroaniline, dms., c.l., frt. alld.	lb.	.75	- —
dms., l.c.l., same basis	lb.	.77	- —
tanks, same basis	lb.	.73	- —
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52	- —
dms., l.c.l., same basis	lb.	.54	- —
tanks, same basis	lb.	.50	- —
p-Chloroaniline, dms., c.l., frt. alld.	lb.	.77	- —
dms., l.c.l., same basis	lb.	.79	- —
o-Chlorobenzaldehyde, dms., t.l., works	lb.	1.05	- —
dms., l.t.l., same basis	lb.	1.20	- —
p-Chlorobenzaldehyde, dms., l.c.l., works	lb.	1.95	- —
o-Chlorobenzoic acid, fib. dms., t.l., works	lb.	1.10	- —
fib. dms., smaller lots, works	lb.	1.25	- —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works	lb.	2.25	- —
fib. dms., less than 2,000-lbs., same basis	lb.	2.30	- —
Chloroform, tech., dms., c.l., dlvd. E	lb.	.18	- —
dms., l.c.l., same basis	lb.	.19	- —
tanks, same basis	lb.	.17	- —
USP, dms., c.l., dlvd.	lb.	.27	- —
dms., l.c.l., dlvd.	lb.	.30	- —
tanks, minimum 4,000 gals. dlvd.	lb.	.25	- —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis	lb.	.81	- —
Powd., dlvd. E., 100% basis	lb.	.86½-	—
4-Chloro-2-nitroaniline, powd., dlvd. E	lb.	.86	- —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld	lb.	.75	- —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.99	- —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.17	- —
o-Chlorophenol, dms., c.l., frt. equald	lb.	.37	- —
dms., l.c.l., same basis	lb.	.38	- —
p-Chlorophenol, dms., c.l., frt. equald	lb.	.37	- —
dms., l.c.l., same basis	lb.	.38	- —
Chloropicrin, coml., cyls., 180 lbs., frt. alld	lb.	1.07	- —
cyls., 100 lbs., same basis	lb.	1.08	- —
cyls., 50 lbs., same basis	lb.	1.14	- —
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465-	—
dms., l.c.l., frt. equald	lb.	.0515-	—
tanks, frt. equald	lb.	.0415-	—
Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher			
o-Chlorotoluene, tech., dms., t.l., works	lb.	.37	- —
dms., l.c.l., l.t.l., same basis	lb.	.38	- —
Choline bitartrate, fib. dms., frt. adjusted	kilo	2.75	- 3.00
Choline chloride, fib. dms., frt. adjusted	kilo.	2.75	- 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted	kilo.	2.75	- 3.00
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., dlvd. E. of Rockies.	lb.	.43	- —
blue content, 16-30%, bbls., same basis	lb.	.44	- —
blue content, 41-45%, bbls., same basis	lb.	.44	- —
blue content, 45-49%, bbls., same basis	lb.	.45	- —
Reduced color 25%, bbls., same basis	lb.	.20	- —
Chrome green prices 1c. higher W. of Rockies.			
Chrome orange, CP, bbls., dlvd. E of Rockies	lb.	.35	- —
Chrome orange prices 1c. higher W. of Rockies.			
Chrome yellow, CP, bbls., dlvd. E. of Rockies	lb.	.35	- —
Chrome yellow price 1c. higher W. of Rockies.			
Chromic acid, 99¾%, dms., c.l., works, frt. equald	lb.	.29½-	—
dms., l.c.l., dlvd. N. Y. Metropolitan area	lb.	.30	- .31
Chromic acid, NF (see Chromium trioxide).			
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works.	lb.	.10	- —
Chromium fluoride, bbls., works	lb.	.51	- .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt .alld.	lb.	1.20	- —
Pure, bgs., c.l., frt. alld	lb.	.44½-	—
bgs., l.c.l., same basis	lb.	.45¼-	—
Chromium trioxide, NF, bots	lb.	1.15	- —
Cinchona bark, NF, red, broken, bgs	lb.	.25	- —
NF, yellow, broken, bgs	lb.	.35	- .40
Cinnamic acid, refd., bots	lb.	2.50	- 3.50
Cinnamic alcohol, bots	lb.	1.75	- 2.20
Cinnamic aldehyde, dms	lb.	.92	- 1.25
Cinnamon, Ceylon, No. 2, bgs.	lb.	.62	- —
Ceylon, No. "0000," bgs	lb.	.78	- —
Cinnamon bark oil, bots	lb.	36.00	-70.00
Cinnamon leaf oil, crude, dms.	lb.	1.60	- 2.00
USP, (Cassia), cns., dms	lb.	8.50	-13.50
Citral, CP, bots	lb.	3.75	- 4.25
Extra, bots.	lb.	4.50	- 6.10
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l	lb.	.29½-	.30
bgs., dms., 10,000-lb. lots, 1 shipt	lb.	.30	- .30⅛
bgs., dms., smaller lots	lb.	.30½-	.31
USP, hydrous, fine gran., bgs., dms., c.l	lb.	.27½-	.28
bgs., dms., 10,000-lb. lots, 1 shipt	lb.	.28	- .28⅛
bgs., dms., smaller lots	lb.	.29	- .29⅛
Powdered citric acid ½c. per lb. higher.			

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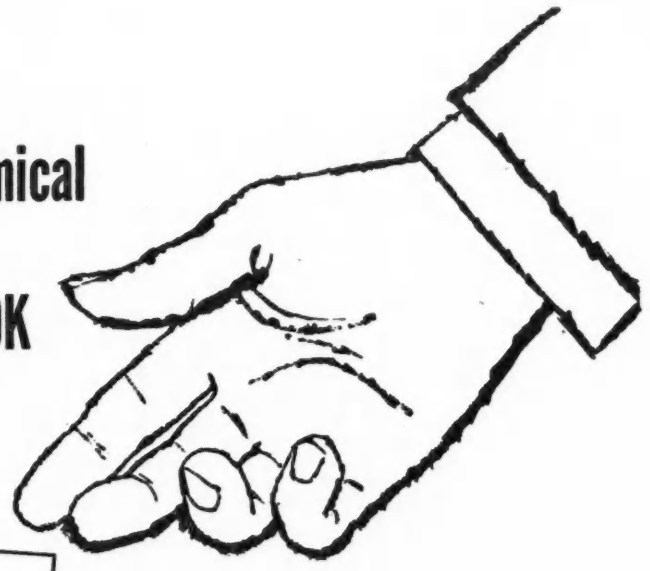

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In these fields, Pittsburgh Chemical will vigorously maintain a policy of planned growth and expansion through (1) intensive new process and application research, (2) alert, personalized sales service and (3) responsive and competent technical assistance.

We believe this policy will inevitably contribute to the growth and profit of Pittsburgh Chemical Company's customers.

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UNITED STATES CONCRETE PIPE COMPANY • COKE & IRON DIVISION

Citronella oil, Ceylon, dms.....lb. 1.10 - 1.25
Java-type, dms.....lb. .85 - 1.25
Citronellal, bots., dms.....lb. 1.60 - 2.10
Citronellol, bots., dms.....lb. 2.30 - 3.70
Civet, artif., bots.....lb.13.75 -15.00
Nat., bots.....oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton.17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
imp., airfloated, bgs., c.l., Atl. port net-ton.42.00 -45.75
lump, bulk, Atl. port net-ton.29.50 -35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton.10.00 -12.00
Georgia, bgs., l.c.l., works. ton.15.50 - —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton.13.50 -14.50
bgs., l.c.l., ex-whse ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton.20.00 -35.00
white, powd., bgs., c.l., ex dock. net-ton.50.00 - —
bgs., l.c.l., ex whse net-ton.60.00 -70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 - —
Group 3 .....gal. .12875- —
Houston, Texas .....gal. .145 - —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 .....gal. .154 - —
Houston, Texas .....gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6, tech., solid, dms., frt. alld lb. .77 - —
1.7, tech., dms., frt. alld.....lb. 2.20 - —
Cloves, Madagascar, bgs.....lb. .40½- —
Zanzibar, bgs. .....lb. .42½- —
Clove bud oil, USP, dms.....lb. 2.70 - 3.60
Clove leaf oil, crude, dms .....lb. 1.30 - 1.70
CMC, crude, 96.4% low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse.. gal. .39 - —
tanks, works .....gal. .20½- —
Coaltar pitch, aluminum, bulk, works. ton.44.00 - —
Carbon and indust., bulk, works. ton.44.00 - —
Core, bulk, works.....ton.40.50 - —
Fiber, bulk, works.....ton.48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works ton.41.00 - —
Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms. lb. .71½- —
Liq., 6% Co., dms .....lb. .57½- —
Cobalt metal, 99%, dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R. lb. 1.15 - —
70-71% Co., kgs., same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz.17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz.13.75 - —
Cocillana bark, bls.....lb. .18 - .20
Cocoa butter, bgs.....lb. .56½- .61½
Coconut oil, crude, tanks, New York lb. .18 - —
tanks, Pac. coast .....lb. .16 - —
Refd., deodorized, dms .....lb. .25 - .26
Coconut oil acids, dist., dms....lb. .30½- .33
tanks .....lb. .28 - —
Double dist. (stripped), dms lb. .31½- .34
tanks .....lb. .29 - —
Cod oil, dms., spot.....lb. .08¾- .08½
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms.....gal. 1.40 - 1.70
Cohosh root, black, bls.....lb. .20 - .25
Blue, bls.....lb. .20 - .25
Colchicine, USP, bots.....oz.29.00 - —
Colchicum root, bls.....lb. .35 - .45
Colchicum seed, bgs.....lb. 1.00 - 1.25
Collodion, USP, dms.....lb. .32½- —
USP, flexible, dms.....lb. .34 - —
Colocynth pulp, bls.....lb. .75 - —
Colombo root, bls.....lb. .16 - .18
Condurango bark, bls.....lb. .18 - .20
Congo copal gum, No. 1, bgs....lb. .25 - .27
No. 2, bgs.....lb. .22 - .24
No. 3, bgs.....lb. .17 - .20

Copaiba balsam, cns., dms.....lb. .60 - .65
Copaiba oil, cns.....lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works.....lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works.....lb. .3785- —
Copper chloride, cupric, anhyd., dms., works lb. .45½- .46
cryst., dihydrate, dms., works. lb. .31 - .31½
cryst., dried, dms., works lb. .39¼- .39¾
Copper chloride, cuprous, dms., works lb. .4135- .4435
Copper cyanide, tech., dms., 20,000-lb. lots or more lb. .609 - —
dms., 1,000-lb. lots or more. lb. .619 - —
dms., smaller lots.....lb. .639 - .65
Copper gluconate, dms.....lb. 3.20 - —
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .53½- —
dms., l.c.l., same basis .....lb. .54 - —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 - .36
Copper naphthenate, liq., 8% Cu, dms, frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .49¼- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots. lb. .50½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .46½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .41½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs.13.00 - —
bgs., l.c.l., works 100 lbs.13.25 -15.75
Monohydrated, 35%, dms., c.l., works 100 lbs.24.00 - —
dms., l.c.l., works 100 lbs.24.75 - —
Tribasic, distributors, bgs., c.l., works 100 lbs.29.60 - —
bgs., l.c.l., works 100 lbs.31.10 - —
Copper undecylenate, dms .....lb. 2.75 - —
Copra, Atl., Gulf ports, c.i.f.....ton.217.50 - —
Pac. ports, c.i.f. .....lb.212.50 - —
Coriander oil, USP, bots .....lb. 9.00 -10.00
Coriander seed, Moroccan, bgs lb. .08 - —
Rumanian, bgs. .....lb. .07½- —
Yugoslavian, bgs. .....lb. .08½- —
Corn oil, crude, tanks, works ....lb. .14 - —
Foots (soapstock) acid 95%, tanks, New York lb. .04¾- —
Refd., salad, dms. .....lb. .1973- .2000
tanks .....lb. .1773- —
Corn oil acids, dist., dms.....lb. .16¾- .19¼
tanks .....lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l .....100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l. 100 lbs. 7.31 - —
non-ret. dms., l.c.l .....100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.90
Costus oil, bots .....oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton.59.00 - —
Cottonseed oil, crude, tanks, South East lb. .10½- .10¼
tanks, Valley .....lb. .10 - .10⅛
tanks, Texas, Lubbock .....lb. .09¾- —
tanks, Texas, Waco .....lb. .10 - —
Foots (soapstock), acid, 95%, tanks, New York lb. .03¾- —
Refd., salad, dms. .....lb. .15⅛- .15¼
tanks .....lb. .13⅛- —
Cottonseed oil acids, dist., dms lb. .16¾- .19¼
tanks .....lb. .14¼- —
Coumarin, NF, cryst., dms....lb. 3.30 - 3.40
Cramp bark, NF, bls .....lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works. gal. .226 - —
Refd., dms., c.l., works .....gal. .50 - —
dms., l.c.l., same basis....gal. .62 - —
tanks, same basis .....gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, cbys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works. lb. .0561- —
dms., incl., l.c.l., works .....lb. .0634- —
dms., incl., l.c.l., ex whse, New York. lb. .0745- —
tanks, works .....lb. .0460- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis .....lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis. lb. .19 - —
tanks, same basis .....lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
dms., l.c.l., works .....lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis .....lb. .19 - —
tanks, same basis .....lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis .....lb. .23 - —
tanks, same basis .....lb. .20 - —
o-Cresol 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis .....lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis .....lb. .14½- —
29°-29.6°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis .....lb. .14 - —
25°-26°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis .....lb. .13 - —

p-Cresol, 98%, dms., c.l., dlvd..lb. .52 - —
dms., l.c.l., dlvd.....lb. .53 - —
tanks, dlvd. .....lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works. lb. .70 - —
dms., smaller lots, works.....lb. .72 - —
p-Cresyl methyl ether, cns....lb. 1.80 - 2.05
Cresylic acid coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis..gal. 1.40 - —
tanks, same basis .....gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis..gal. 1.25 - —
tanks, frt. equald .....gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis..gal. 1.05 - 1.15
tanks, same basis.....gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
bgs., l.c.l., works .....100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works..lb. .21 - —
bgs., l.t.l., works.....lb. .22 - —
Cubeb berries, NF, bgs.....lb. 1.00 - —
Powd., cs. .....lb. 1.15 - —
Cubeb oil, cns.....lb.12.00 -16.00
Cumene, dms., c.l., works.....lb. .12 - —
dms., l.c.l., works.....lb. .14 - —
tanks, works .....lb. .11 - —
Cumin seed, Iranian, bgs.....lb. .30 - —
Moroccan, bgs. .....lb. .31 - —
Turkish, bgs. .....lb. .27 - —
Cumin seed oil, bots., cns .....lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton.57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton. 2.85 - —
Indust. grade, bgs., c.l. works. ton.75.00 - —
bgs., l.c.l., works.....ton.96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton.120.00 - —
dms., l.c.l., works ....ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies gal. 1.02 - —
dms., l.c.l., same basis ....gal. 1.10 - —
dms., c.l., dlvd. W. of Rockies .gal. .77 - —
dms., l.c.l., same basis .gal. .85 - —
tanks, works .....gal. .55 - —
98%, tech., 40-dm. lots or more, f.o.b. works..gal. .56 - —
5-39 dms., same basis...gal. .60 - —
tanks, same basis .....gal. .36 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E .lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis....lb. .26 - —
Cyclohexanone, tech., dms., c.l., works .lb. .33½- —
dms., l.c.l., works.....lb. .34½- —
tanks, works .....lb. .31 - —
Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works.....lb. .50 - —
tanks, works .....lb. .47 - —
Cypress oil, bots.....lb. 5.30 - —

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2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis.....lb. .48 - .52
tanks, same basis.....lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works .lb. .43 - —
dms., l.c.l., works.....lb. .48 - .52
tanks, works .....lb. .42 - —
Dammar gum, Batavia, A E, cs..lb. No stocks.
East India, Batu, bold, bgs. ..lb. .15 - .17
nubs and chips, bgs. .....lb. .09 - .10
black, bold, bgs. .....lb. .15 - .17
nubs and chips, bgs. .....lb. .12¼- .13½
unscraped, bgs. .....lb. .13 - .14½
pale, chips, bgs. .....lb. .15 - .17
pale, nubs, bgs. .....lb. .20¾- .24
Siam, cs. .....lb. .30 - .33
Singapore, No. 1, bgs. .....lb. .34 - .40
No. 2, bgs. .....lb. .29 - .32
No. 3, bgs. .....lb. No stocks.
dust, bgs. .....lb. .18 - .20
Dandelion root, bls. .....lb. .28 - .32
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots, same basis. lb. .25 - —
fib. dms., c.l., same basis ..lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. .....lb. .45½- —
tanks, dlvd. E. .....lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd. .....lb. .25 - —
tanks, dlvd. .....lb. .21 - —
Perfume grade, bots. .....lb. 1.00 - 2.00
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves, bls. .....lb. .55 - .60
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton.53.00 - —
18% P, paper bgs., c.l., works. ton.66.25 -71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton.74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 - —
Neutral (over 2% free fatty acid), 400-lb. dms lb. .19 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis .....gal. .74½- .80½
tanks, dlvd., same basis....gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies. gal. .72 - —
dms., l.c.l., same basis.....gal. .77 - .82
tanks, same basis .....gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies..gal. .70½- —
dms., l.c.l., same basis....gal. .75½- .81⅛
tanks, same basis .....gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 - —
dms., l.c.l., same basis....gal. .74 - .80
tanks, same basis.....gal. .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis....gal. .73 - .70
tanks, same basis .....gal. .52 - —
SD23A, dms., c.l., dlvd. E. of Rockies..gal. .70½- —
dms., l.c.l., same basis....gal. .75½- .81⅛
tanks, same basis .....gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies..gal. .71 - —
dms., l.c.l., same basis....gal. .76 - .82
tanks, same basis .....gal. .55 - —
Denatured alcohol, ethyl SD29, dms., c.l, dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis...gal. .74½- .80⅛
tanks, same basis.....gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis....gal. .73 - .70
tanks, same basis .....gal. .52 - —
SD-35A, dms., c.l., dlvd. E. of Rockies..gal. .71 - —
dms., l.c.l., same basis....gal. .76 - .82
tanks, same basis .....gal. .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies..gal. .70½- —
dms., l.c.l., same basis...gal. .75½- .81⅛
tanks, same basis .....gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb..15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms..lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 - —
paper bgs., l.c.l. .....100 lbs. 9.53 - —
canary dark, paper bgs., c.l. 100 lbs. 9.22 - —
paper bgs., l.c.l. .....100 lbs. 9.37 - —
Dextrin, corn, indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 - —
paper bgs., l.c.l. .....100 lbs. 9.27 - —
white, paper bgs., c.l. 100 lbs. 8.96 - —
paper bgs., l.c.l. ....100 lbs. 9.11 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs., l.c.l. .....100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms .100 lbs.14.70 - —
100-lb. dms. .....100 lbs.15.20 - —
Hydrated, coml., bgs., c.l., ex whse..100 lbs. 7.45 - —
bgs., c.l., ex whse ...100 lbs. 7.60 - —
USP, dms. .....lb. .19¾- —
Diacetyl, flavor grade, bots. ....lb. 4.30 - 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works .....lb. .33 - —
tanks, works .....lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works .....lb. .33 - —
tanks, works .....lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. .....lb. .17 - —
tanks, dlvd. .....lb. .13 - —
Tech., dms., c.l., dlvd. .....lb. .15 - —
dms., l.c.l., dlvd. .....lb. .16½- —
tanks, dlvd. .....lb. .12½- —
Dialkylamine, dms., c.l., dlvd. ....lb. .98½- —
dms., l.c.l., dlvd. .....lb. 1.00 - —
tanks, dlvd. .....lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis.....lb. .94 - —
tanks, same basis.....lb. .91 - —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. . lb. .65 - —
l.t.l., dms., same basis .....lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb. .65 - —
dms., l.t.l., same basis .....lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. ...lb. .57 - —
dms., l.c.l., same basis.....lb. .60 - —
tanks, same basis.....lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E.....lb. .33 - —
tanks, dlvd. E.....lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E.....lb. .33 - —
tanks, dlvd. E.....lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .28½- —
dms., l.c.l., same basis .....lb. .30 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works.....lb. .68½- —
tanks, works .....lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd. lb. .55½- —
dms., l.c.l., same basis.....lb. .57 - —
tanks, same basis .....lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. .....lb. .29 - —
tanks, dlvd. .....lb. .25 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works.....lb. .63½- .64
tanks, works .....lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld. lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis.....lb. .13¾- —
tanks, same basis.....lb. .11 - —

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p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E lb. .12 - —
dms., 2,000 lbs. or more same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms., l.c.l., same basis lb. .75 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 - —

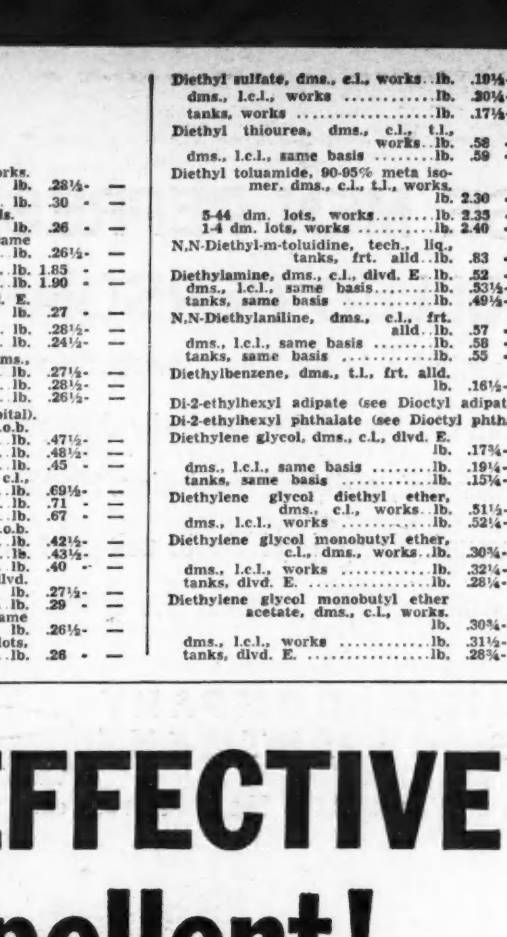
Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tankcars, tanktrucks, 2,000 gals. lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., dlvd. lb. 1.85 - —
dms., l.c.l. dlvd. lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 - —

Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 - —
dms., l.c.l., same basis lb. .59 - —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works. lb. 2.30 - —
5-44 dm. lots, works lb. 2.35 - —
1-4 dm. lots, works lb. 2.40 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
Diethylamine, dms., c.l., dlvd. E lb. .52 - —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E. lb. .28¾- —

Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22¼- —
dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. E. lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., dlvd. lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E. lb. .44 - —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41½- —
Diethylstilbesterol, USP, bots., 10-kilo lots kilo. 100.00 -147.50
bots, 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms. lb. 1.25 - —
Digitoxin, USP, bots. gram. 4.20 - —
Diglycol laurate, dms. lb. .32¾- .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs,, c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate, bulk. gram. .035 - .036
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
Tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 - —
dms., 150 lbs. to 1,050 lbs lb. 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E. lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .25½- —
tankcars, tanktrucks, 2,000 gals., dlvd lb. .25 - —
Di-iso-octyl sebacate, dms., c.l., works. lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms lb. 3.00 - 4.00
Dimethyl anthranilate, cns. lb. 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb. 3.50 - —
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis. lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies. lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W. of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol, bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld. lb. .27½- —
dms., l.c.l., frt. alld. lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —

The MOST EFFECTIVE Insect Repellent!

DIETHYLTOLUAMIDE



Cowles
DETAMIDE® 95

Cowles DETAMIDE 95 is superior in color, odor characteristics, and stability. No unpleasant odor . . . water white . . . and stays that way. We guarantee a minimum 95% meta-isomer content — the isomer that has the most repellency!

Cowles has the capacity to supply your needs immediately and steadily. Write for technical data and prices on your letterhead.

Sold in 5-gallon or 55-gallon drums.

1885—75th Anniversary—1960

Cowles CHEMICAL COMPANY
Cleveland 3, Ohio

Dipentaerythritol, bgs., c.l., t.l., dlvd. E..lb. .40 - —
bgs., l.c.l., l.t.l., dlvd. E. .....lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works..gal. .59 - —
dms., l.c.l., works .....gal. .63 - —
dms., l.c.l., ex whse.....gal. .79 - —
tankcars, works.....gal. .42 - —
Steam dist., dms., c.l., works, South..gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South .....lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works..lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works..lb. 1.00 - —
Diphenyl, bgs., c.l., t.l., works....lb. .16¾- —
bgs., l.c.l., works .....lb. .18½- —
tanks, works .....lb. .15¾- —
Diphenyl oxide, perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works .....lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald..lb. .31 - —
bgs., l.c.l., same basis.....lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
Refd., diphenylamine in dms., ½c. per lb. higher.
Diphenylguanadine, bgs., dms., ton lots, frt. alld..lb. .49 - —
bgs., smaller lots, frt. alld.....lb. .50 - —
Diphenylhydantoin-sodium, USP, dms..lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld..lb. .17 - —
dms., l.c.l., frt. alld. .....lb. .18½- —
tanks, frt. alld. .....lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E..lb. .20 - —
dms., l.c.l., same basis.....lb. .21½- —
tanks, same basis .....lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works..lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld..lb. .69 - —
dms., smaller lots, frt. alld....lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld..lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald..lb. .20 - —
dms., l.c.l., same basis.....lb. .21 - —
tanks, same basis .....lb. .19 - —
50-60%, dms., c.l., works, 100% basis..lb. 1.00 - —
dms., l.c.l., works, 100% basis. lb. 1.05 - —
tanks, same basis .....lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E..lb. .75 - —
dms., l.c.l., l.t.l., same basis..lb. .76 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald..lb. .134 - —
dms., l.c.l., same basis.....lb. .144 - —
tanks, same basis .....lb. .11 - —
Dodecylphenol, c.l., frt. alld. .....lb. .22 - —
dms., l.c.l., same basis.....lb. .23 - —
tanks, same basis .....lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1.....lb.15.65 -17.60
No. 2 .....lb.15.65 -17.60
Green, FD&C, No. 1.....lb.15.65 -17.60
No. 2 .....lb.19.60 -22.85
No. 3 .....lb.31.30 -35.90
Red, FD&C, No. 1 .....lb. 5.90 - 7.85
No. 2 .....lb. 3.30 - 4.10
No. 3 .....lb.19.60 -22.85
No. 4 .....lb. 5.35 - 7.50
Violet, FD&C, No. 1.....lb.15.65 -17.60
Yellow, FD&C, No. 1 .....lb. 9.15 -11.05
No. 5 .....lb. 3.30 - 4.10
No. 6 .....lb. 3.30 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:—
Black, D&C, No. 1 .....lb.10.50 -10.93
Brown, D&C, No. 1 .....lb.15.65 -16.10
Green, D&C, No. 5 .....lb.15.65 -16.10
No. 6 .....lb.15.65 -16.10
No. 7 .....lb.14.35 -14.80
Orange, D&C, No. 3 .....lb.10.50 -10.95
No. 4 .....lb.19.60 -20.05
No. 5 .....lb. 3.80 - 4.25
Red, D&C, No. 17 .....lb.10.50 -10.95
No. 18 .....lb.23.60 -24.00
No. 19 .....lb.15.00 -15.45
No. 21 .....lb. 3.90 - 4.35
No. 22 .....lb.10.50 -10.95
No. 23 .....lb.24.15 -24.65
No. 33 .....lb.17.00 -17.45
Violet, D&C, No. 2 .....lb.15.65 -16.10
Yellow, D&C, No. 7 .....lb.10.50 -10.95
No. 8 .....lb.10.50 -10.95
No. 10 .....lb.13.05 -13.50
No. 11 .....lb.13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:—
Blue, Ext., D&C, No. 1.....lb.15.65 -16.10
Green, Ext., D&C, No. 1.....lb.15.65 -16.10
Red, Ext., D&C, No. 1.....lb.13.05 -13.50
Yellow, Ext., D&C, No. 1.....lb.10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet BN.....lb. 1.79 - —
13390 Fast blue SR.....lb. 1.43 - —
14025 Yellow 2G .....lb. 1.26 - —
14030 Orange R, extra, conc. ..lb. 1.64 - —
14645 Chrome black T .....lb. .77 - —
14720 Rubine XX, conc. .....lb. 1.59 - —
15510 Orange Y, extra conc. .lb. .83 - —
15575 Orange RR .....lb. .99 - —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract, dlvd. No.
15620 Fast Red A, conc .....lb. 1.61 - —
15705 Chrome blue black R, conc. lb. 1.12 - —
16150 Scarlet 2RL .....lb. 1.22 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 - —
16230 Fast light, orange 2G...lb. 1.39 - —
17390 Brown PG .....lb. 3.00 - —
18050 Phloxine 2G .....lb. 1.05 - —
18055 Fuchsine 6B .....lb. 1.55 - —
18965 Fast yellow 2G .....lb. 2.32 - —
19140 Yellow XX .....lb. 2.48 - —
19555 Yellow NN, conc. .....lb. 3.67 - —
20170 Brown Y .....lb. 1.33 - —
20470 Blue black, extra, conc..lb. 1.44 - —
21010 Brown, RX, conc. .....lb. 1.35 - —
22240 Scarlet B .....lb. 2.81 - —
22310 Red FC .....lb. 1.57 - —
22311 Brown MCW .....lb. 1.47 - —
22390 Diazo black BHD .....lb. .93 - —
22610 Blue 2B, extra conc. ....lb. 1.53 - —
23500 Red, 4BX, conc. .....lb. 1.80 - —
24410 Sky blue FF, extra, conc.lb. 1.95 - —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale of prototype), contract dlvd. No.
24895 Brilliant yellow, conc. ..lb. 3.27 - —
26360 Navy blue 3R, conc. ....lb. 1.84 - —
26695 Black F, conc. .....lb. 2.30 - —
26900 Milling Red 3R, conc. ....lb. 1.91 - —
27075 Neutral black 2B, conc..lb. 2.75 - —
27720 Gray L .....lb. 2.18 - —
29185 Fast scarlet 4BNC.....lb. 2.23 - —
30015 Diazo black VJ conc. ....lb. 2.48 - —
30045 Yellow brown K, extra..lb. 1.26 - —
30235 Black EB, 200%.....lb. 1.33 - —
30295 Green BY, conc. .....lb. 1.07 - —
35660 Brown B .....lb. 2.89 - —
37565 Naphthol SWF .....lb. 1.85 - —
40000 Yellow 2G .....lb. 1.44 - —
41000 Yellow OX .....lb. 2.45 - —
42000 Green V, crystals.....lb. 2.73 - —
42040 Brilliant green G crystals.lb. 3.62 - —
42090 Blue EG .....lb. 1.85 - —
42100 Milling green 6B, conc. ..lb. 4.78 - —
42640 Violet 4BXN .....lb. 2.43 - —
43830 Brilliant blue, BBG.....lb. 2.44 - —
44045 Blue B, extra conc. .....lb. 3.61 - —
45170 Red BX .....lb. 4.76 - —
50415 Nigrosine SSJ .....lb. 1.03 - —
52015 Blue GXX .....lb. 2.33 - —
53185 Black, GXCF, conc. ....lb. .38 - —
58005 Alizarin red SC .....lb. 3.64 - —
59700 Golden orange GFD, single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder..lb. 4.90 - —
59800 Dark blue BO, single paste. lb. 2.28 - —
59825 Jade green NC supra, double paste..lb. 1.50 - —
61570 Alizarin green CG, extra lb. 3.81 - —
63010 Alizarin blue SAPG ....lb. 3.90 - —
63615 Alizarin blue black B ....lb. 3.26 - —
69825 Blue BLFD double paste lb. 2.82 - —
70800 Brown BR single paste..lb. 2.03 - —

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.
12140 Oil scarlet BL .....lb. 1.87 - —
12055 Oil orange 7078 V .....lb. 1.38 - —
26120 Oil red N 1700 .....lb. 1.94 - —
42535B Methyl violet base .....lb. 1.88 - —
44045B Victoria blue base ....lb. 4.05 - —
50415B Oil black 8603 .....lb. .80 - —
61565 Alizarin cyanine green base, lb. 6.13 - —
Spirit black RB .....lb. 3.89 - —
Spirit brown GN .....lb. 5.30 - —
Spirit orange R conc. ....lb. 5.87 - —
Spirit red B conc.....lb. 6.41 - —
Pr. 517 Spirit yellow 2R conc. lb. 4.62 - —
Pr. 554 Spirit blue THN.....lb. 5.06 - —

E

Echinacea root, bls. .....lb. 1.25 - —
Elm bark, grinding, bls. .....lb. .30 - .22
Powd., bbls., bxs. .....lb. .50 - .55
Select, bundles.....lb. .75 - —
Emetine hydrochloride, USP, bots. oz.48.40 - —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd..lb. 2.70 - —
Eosin red toner, bbls., works....lb. 1.85 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots oz. .93 - 1.00
hydrous, bots., 100-oz. lots. oz. .92 - —
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works..oz. .72 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd. .....lb. .31 - —
tanks, dlvd. .....lb. .27 - —
Epsom salt (see Magnesium sulfate).
l-Epinephrine base, syn., USP, bots., 100 gram. lots gram. .58 - —
Erigeron oil, cns. .....lb.11.00 - —
Ergot, NF, dms., tin-lined .....lb. 1.00 - 1.25
Eserine salicylate, bots. .....oz.44.00 - —
Eserine sulfate, bots. .....oz.36.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½- —
Wood-rosin type, dms., c.l., same basis lb. .13½- —
Ether (see specific product).
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd..lb. .15 - —
dms., l.c.l., dlvd. .....lb. .16½- —
tanks, dlvd. .....lb. .12½- —
95-98%, dms., c.l., dlvd. ..lb. .15¼- —
dms., l.c.l., dlvd. .....lb. .16¾- —
tanks, dlvd. .....lb. .12¾- —
99%, dms., c.l., dlvd. .....lb. .15½- —
dms., l.c.l., dlvd. .....lb. .17 - —
tanks, dlvd. .....lb. .13 - —

IN YOUR IMPROVED PRODUCTS...

Jefferson SURFONIC® Surface-Active Agents make the best kitchen helpers

Men are nice to have around but not so dependable in the kitchen as your work-saving products that contain SURFONIC® Surface-Active Agents. Virtually every item she keeps beneath the sink is made better by the broad modification properties of these Jefferson surfactants . . . low-foaming laundry detergents, low- and high-foaming liquid detergents, general purpose cleaners, germicidal detergents, sanitizers, metal cleaners, and many others. And indirectly, the cost of our foods is reduced by the use of surface-active agents in insecticides and herbicides.

SURFONIC® Surface-Active Agents are adducts of ethylene oxide and nonyl phenol (N-series 10 to 300) or tridecyl alcohol (TD-series 30 to 150). These surfactants are nonionic and have excellent wetting, detergency, solubility, penetration, dispersion, emulsifying and compatibility properties. They are stable over a wide range of conditions.

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Ethylene and Propylene Oxides, Glycols, Dichlorides, Carbonates
SURFONIC® Surface-Active Agents • Ethanolamines • Morpholine
N-Alkyl Morpholines • Polyethylene and Polypropylene Glycols
Piperazine • Piperazine Salts • Nonyl Phenol • Caustic Soda
HOUSTON • NEW YORK • CHICAGO • CLEVELAND • CHARLOTTE • LOS ANGELES

JEFFERSON CHEMICALS

Ethyl acetate, syn., 85-88%, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
95-98%, dms., c.l., dlvd. lb. .15¼- —
dms., l.c.l., dlvd lb. .16¾- —
tanks, dlvd. lb. .12¾- —
99%, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —

Ethyl acetoacetate, dms., c.l., dlvd. lb. 58½- —
dms., l.c.l., dlvd. lb. .60 - —
tanks, dlvd. lb. .56 - —

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 - —
dms., l.t.l., dlvd. lb. .37 - —
tanks, dlvd. lb. .34 - —

Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies gal.20.63 - —
dms., l.c.l., same basis gal.20.68 -20.74

Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —

Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies gal.21.75 - —
dms., l.c.l., same basis gal.21.80 -21.86
tanks, same basis gal.21.59 - —

Ethyl alcohol, denatured (see Denatured alcohol, ethyl).

Ethyl aminobenzoate, USP (see Benzocaine).

Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —

Ethyl benzoate, bots. lb. .75 - 1.00

Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .43 - —
dms., l.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E lb. .41 - —

Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., l.t.l., works lb. .36¾- —
tanks, works lb. .34 - —

Ethyl butyrate, dms., works lb. .85 - 1.00

Ethyl carbamate (see Urethane).

Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld. E lb. .75 - —
Vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld. E lb. .70 - —

Ethyl chloride, tech., cyls., works. lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —

Ethyl cinnamate, cns. lb. 3.35 - 3.50

Ethyl ethanolamies, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E. lb. .41½- —

Ethyl ether, absolute, ACS, dms lb. .27 - —
Anesthesia, USP, dealers, 1-lb. cns lb. 1.01 - —
½-lb. cns lb. 1.09 - —
¼-lb. cns lb. 1.21 - —
Indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. E. lb. .15 - —
tanks, dlvd. E. lb. .11 - —

2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., l.c.l., l.t.l., dlvd. E lb. .38½- —
tanks, dlvd. E. lb. .34½- —

2-Ethyl hexoic acid, lc. higher W. of Rockies.

2-Ethyl hexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —

Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

2-Ethylhexyl alcohol, dms., c.l., dlvd. lb. .23¾- —
dms., l.c.l. dlvd lb. .25¼- —
tanks, dlvd. lb. .21¼- —

Ethyl iodide, cbys., works lb. 3.30 - —

Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., l.t.l., frt. equald lb. .52½- —
tanks, frt. equald lb. .50 - —

Ethyl morphine hydrochloride, USP, bots. oz.11.85 - —

Ethyl oenanthate, dms lb. 1.05 - 1.30

Ethyl oxalate (see Diethyl oxalate).

Ethyl silicate, dist. (see Tetraethyl orthosilicate).

Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd lb. .44½- —
dms., l.c.l., dlvd lb. .46 - —
tanks, dlvd lb. .42 - —

N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —

N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —

N-Ethyl-o-toluidide, bbls. lb. .88 - —

Ethylamine (see Mono-, Di-, or Tri-)

N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld lb. .58 - —
tanks, frt. alld lb. .55 - —

Ethylbenzene, 99%, dms., c.l., t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —

2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —

Ethylene, contract, ref'y. gate lb. .0475- .0525

Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —

Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —

Ethylene dichloride prices W. of Rockies, lc. per lb. higher.

Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —

Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd. E lb. .19½- —

Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —

Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 - —

Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —

Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 - —

Ethylene glycol monostearate, triple pressed, dms lb. .33 - .35

Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —

Ethylene trichloride (see Trichloroethylene).

Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis, lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —

Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over lb. 6.75 - —
200-lb. lots and over lb. 7.00 - —
100-lb. lots and smaller lb. 7.30 - 7.40

Eucalyptol, USP, cns., dms lb. .85 - 1.40

Eucalyptus oil, NF, rectified, 70-75%, dms lb. .50 - .58
NF, rectified, 80-85%, dms lb. .58 - .65

Eugenol, tech., dms lb. 1.45 - —
USP, dms. lb. 2.10 - 2.80

Euphorbia herb, bls lb. .12 - .15

F

F salt, paste, tech., dms., works lb. 2.30 - —

Feldspar, 140-200 mesh, bulk, c.l., works ton.19.50 - —

Feldspar in bags $3 per ton higher.

Fennel oil, sweet, USP, cns lb. 2.25 - 2.70

Fennel seed, Argentine, bgs lb. .14 - —
French, light, bgs lb. .20 - —
Indian, light, bgs lb. .17 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —

Fenugreek seed, Moroccan, bgs lb. .07½- —

Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 8.50 - —

Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25

42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25

sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —

USP, cryst., dms., t.l., works lb. .08½- —

Ferric citrate, gran., dms lb. .86 - —

Ferric hypophosphite, NF, dms lb. 3.45 - —

Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —

Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .88 - —

Ferric oxides (see iron oxides).

Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 - .75

Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .70 - —

Ferric resinate, 6¾% Fe., dms., ton lots, frt. alld lb. .40¼- —

Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld lb. .40 - .44

Ferric sulfate, partly hydrated, bgs., c.l., works ton.35.25 - —
bgs., l.c.l., works ton.36.25 -42.25
bulk, c.l., works ton.33.25 - —

Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green pearls, USP XII, gran., dms lb. .66 - .69

Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29¼

Ferric-potassium oxalate, fine gran., dms lb. .32½- .34¼

Ferric-sodium oxalate, fine gran., dms lb. .27½- .29¼

Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —

Ferrous sulfate, gran., bgs., c.l., works ton.34.50 - —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —

USP, cryst., bbls., dms lb. .09½- .10

Fir balsam, Canada, bbls gal.32.00 -35.00
Oregon, bbls. gal. 3.40 - 4.04

Fir oil, Canada, cns lb. 1.75 - 2.50

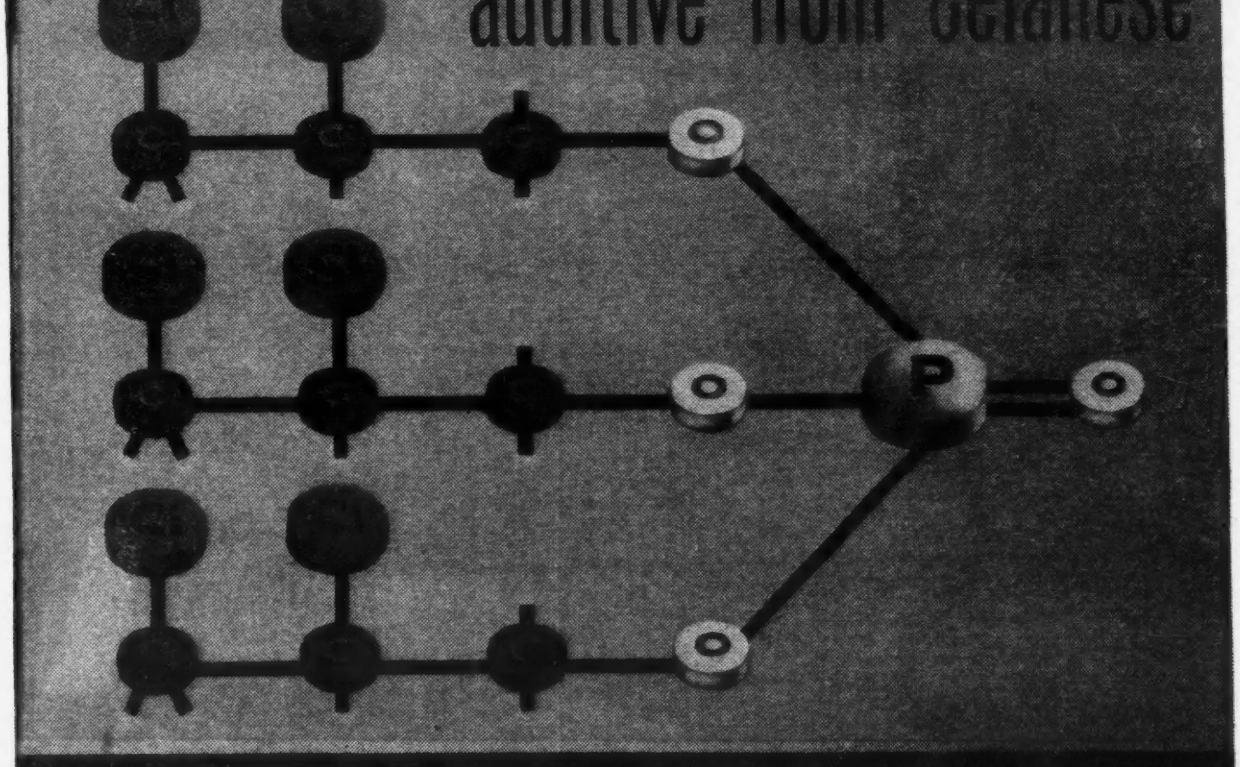
Fish oil, refd., alkali, dms lb. .1300- .1350
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —

Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —

Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton.105.00 - —

Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton.101.00 - —

a new fire-retardant additive from Celanese



CELLUFLEX FR-2 TRIS (DICHLOROPROPYL) PHOSPHATE

Latest in the family of Celanese phosphate-based plasticizers. Celluflex FR-2 is a prime fire-retardant additive for urethane foams, phenolics, polyesters and other plastics, both thermoplastic and thermosetting. The high chlorine (49%) and phosphorus (7.2%) contents are a measure of its ability to suppress flame.

Celanese, pioneer in products designed to meet the growing need for flame resistance, offers Celluflex FR-2 in quantities to fill all your requirements. For specifications, prices and delivery data, write to: Celanese Chemical Company, a Division of Celanese Corporation of America, Dept. 555-D, 180 Madison Avenue, New York 16, N. Y.

Celanese® Celluflex®

Celanese CHEMICALS

In Canada: Canadian Chemical Company, Limited, Montreal, Toronto, Vancouver
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram .30 - .44
10% feed grade, fib. dms., 3 kilos or more kilo 30.00 - 44.00
37% (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0695- —
tanks, dlvd. lb. .0405- —
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .22¾- —
dms., l.c.l., frt. equald lb. .24¼- —
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
tanks, dlvd. W lb. .13 - —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J lb. .20½- —
dms., l.c.l., t.l., Newark, N J lb. .21½- —
dms., c.l., t.l., Memphis, Tenn lb. .19 - —
dms., l.c.l., t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn lb. .175 - —
Fusel oil ref'd. dms., c.l. dlvd lb 18 —
dms., l.c.l. dlvd lb 19½ —
tanks dlvd lb 15½ —

G

G salt bbls frt alld. 100% basis lb 73 - —
Gallic acid NF VII bbls 1,000 lb lots lb 2.00 —
bbls. smaller lots lb 2.02 2.22
Tech., bbls., 1,000 lb. lots lb 1.78 - —
bbls. smaller lots lb 1.80 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 —
Gammapicoline (see g picoline)
Garlic oil dom bots oz 4.75 6.05
Imp bots oz 4.50 5.00
Gaultheria oil (see Wintergreen oil)
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsemium root, bls lb. .30 - .35
Gentian root bls lb .24 —
Grd., bbls., bxs lb 30 —
Powd., bbls bxs lb 30 —
Geraniol, extra, cns., dms lb. 1.75 - 2.40
Soap grade, dms. lb. .90 - 1.75
Standard, cns., dms. lb. .90 - 1.75
Geranium oil, Algerian, cns lb. 19.00 —
Bourbon, cns. lb. 23.00 -26.00
Geranium oil Turkish (see Palmarosa oil)
Geranyl acetate, cns lb 1.90 2.70
Ginger oil, dist., bots lb. 11.50 -14.00
Ginger oleoresin NF from African root, bots lb. 4.25 - 5.00
NF from Jamaican root, bots lb 7.75 - —
Ginger root, Cochin, bgs. lb. .25 - —
Jamaican, No. 3, bgs lb. .30 - —
Nigerian, split, bgs lb. .15 - —
Sierra Leone, bgs. lb. .21 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid tech 50% dms., c.l., t.l. frt alld lb. .18 —
dms c.l. frt alld lb .20½ —
tanks frt alld lb. 13½ —
Glue, bone, extracted dry bone, 86 jellygrams bgs c.l. dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½ —
164 jellygrams, ogs., c.l., same basis lb. .18½ —
191 jellygrams bgs c.l., same basis lb. .19½ —
222 jellygrams ogs. c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16- —
88 jellygrams bgs. c.l., same basis lb. .16 - —
115 jellygrams bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, t.c.l. prices 2c higher.
Glue, hide, 70-94 jellygrams, ogs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-206, bgs., c.l., dlvd. lb. .25 - —
207-235, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½- —
267-298, bgs., c.l., dlvd lb. .32½- —
299-330, bgs., c.l., dlvd lb. .34½- —
331-362, bgs., c.l., dlvd lb. .36½- —
363-394, bgs., c.l., dlvd. lb. .38 - —
395-427, bgs., c.l., dlvd lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494 bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue t.c.l. prices 2c higher.
l-Glutamic acid, 99½% fib dms., 100-lb lots, frt alld lb 1.80 - —
fib dms., 25-lb lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots. 1-9 kilo lots. kilo 150.00 -300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd lb. .21½- .21¾
nat. crude soaplye 80% tanks, dlvd lb. .19 - .19¼
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .30⅞- —
dms., l.c.l., dlvd lb. .31⅛- —
tanks, dlvd. lb. .29⅛- —
nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .30 - —
dms., l.c.l., dlvd lb. .30¾- —
tanks, dlvd. lb. .28¼- —
nat., high gravity, dms., c.l., dlvd, lb. .30¾- —
dms., l.c.l., dlvd lb. .31⅛- —
tanks, dlvd lb. .29 - —
syn., dms., c.l., dlvd lb. .31 - —
dms., l.c.l., dlvd lb. .31¾- —
tanks, dlvd. lb. .29¼- —
Imp. nat., crude, soaplye, 80%, c.l.f. lb. .19 Nom.
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).

Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70% aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb 20½- —
dms., l.c.l works lb. .21¼- —
tanks works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.75 - 3.25
Gramicidin 1 to 5 kilos f.o.b works. gram 4.70 —
Grapefruit oil, dms lb. 2.50 - 2.75
Graphite, amorp. powd., bgs., fib dms., ex whse lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex-whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95% bgs., fib. dms., ex whse lb. .29 - .31
Grease white, choice all hog, tanks, dlvd lb. .07 - .07⅛
Yellow, tanks, dlvd. lb. .05⅞- .06
Grease oil, No. 1, dms., c.l. lb. .13¾ Nom.
dms., l.c.l. lb. .14¾ Nom.
Extra winter, strained, dms, c.l. lb. .16¼ Nom.
dms., l.c.l. .17¼ Nom.
Prime, burning, dms., c.l. lb. .17¾ Nom.
dms., l.c.l. lb. .18¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb. .40 - —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms lb 3.40 - 3.45
Guaiacwood oil, cns lb. .73 - 1.30
Guar gum, food grade bgs., c.l. lb. .38 - —
bgs., 5,000 lbs. or more lb. .39 - —
Indust., bgs., c.l. lb. .32 - —
Tech grade, bgs. lb .30 - .33

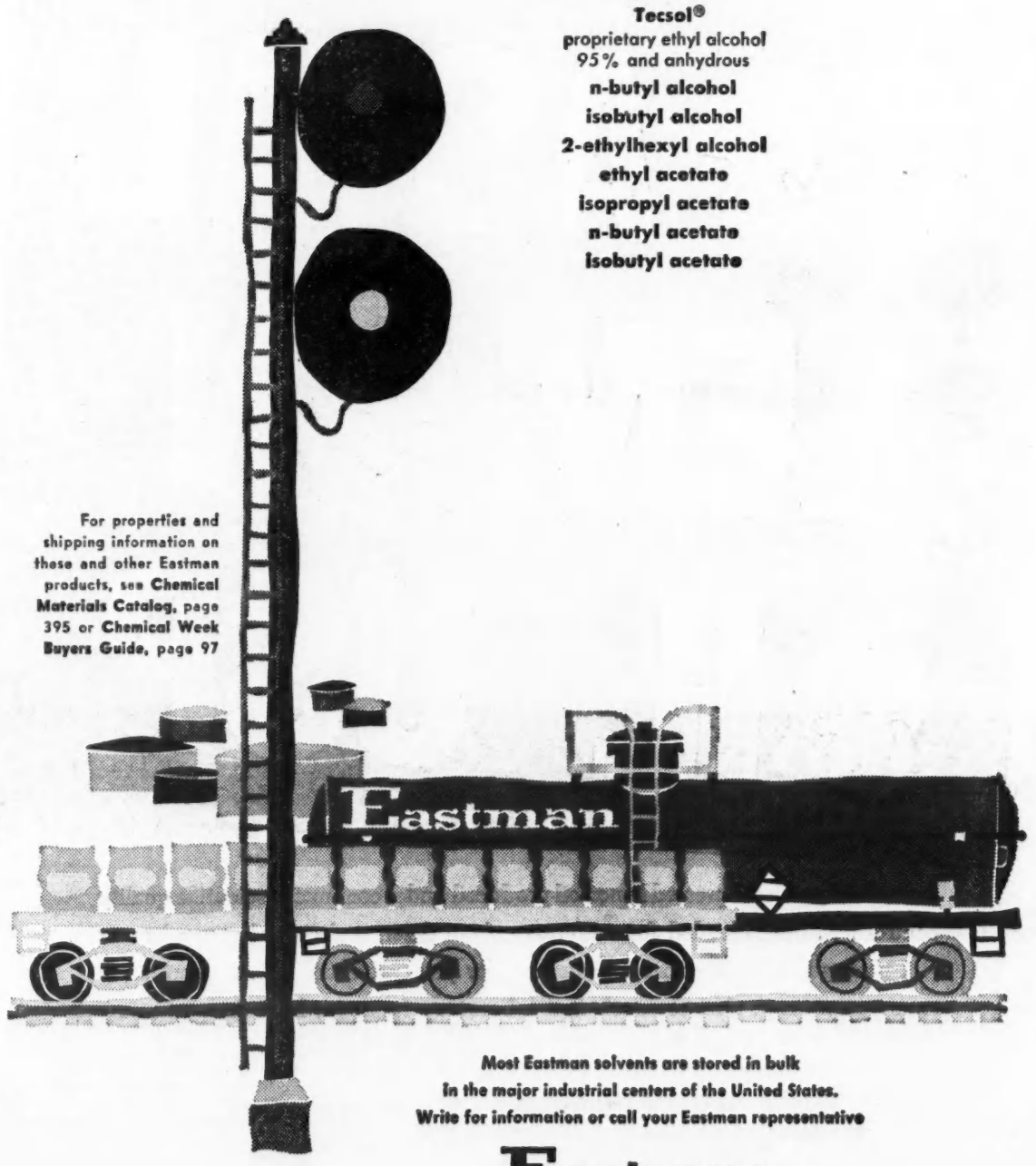
GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton 20.30 - —
Terra alba, dom., 100-lb paper bgs., trucks, same basis ton 20.00 - —
100-lb paper bgs., trucks, works, New York ton 17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton 55.00 - —
100-lb paper bgs., ex whse ton 60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. .95 - —

Hansa yellow 10 G, bbls., dlvd E. of Rockies lb 2.45 —
Hansa G yellow, pigment bbls lb 2.20 —
Hawthorn berries, bgs. lb .18 .20
Heliotropin, 100-lb. lots, dms lb 2.60 3.40
Hellebore root dom. green bls lb .70 .75
Helonias root, bls lb 1.50 —
Hemlock oil, cns lb 2.55 3.00
Henbane leaves, bls. lb. .35 - .40
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas gal. .1625- —
Hesperidin, purif., 100-lb fib. dms., f.o.b. works lb 8.95 —
Hesperidin methylchalcone, bots. 50-lb lots, works lb 22.50 - —
bots., 5-lb lots, works lb 23.00 - —
bots., 1-lb lots works lb 23.50 - —
Hexachloropnene, dms., 1,100 lbs., or more lb 1.84 - —
dms., to 1,100 lbs lb 1.94 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech. bgs., 20,000-lb. lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb lots, same basis lb 243 —
bgs. smaller lots same basis lb 253 —
fib. dms., 1,000-lb lots or more, same basis lb. .250 —
fib. dms., smaller lots, same basis lb .253 —



Eastman
Solvents

acetone
ethyl alcohol
Tecsol®
proprietary ethyl alcohol
95% and anhydrous
n-butyl alcohol
isobutyl alcohol
2-ethylhexyl alcohol
ethyl acetate
isopropyl acetate
n-butyl acetate
isobutyl acetate

For properties and shipping information on these and other Eastman products, see Chemical Materials Catalog, page 395 or Chemical Week Buyers Guide, page 97

Most Eastman solvents are stored in bulk
in the major industrial centers of the United States.
Write for information or call your Eastman representative

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CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Detroit; Framingham, Massachusetts; Greensboro, N. C.; Houston; New York City; Philadelphia; St. Louis. West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Forts, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs. smaller lots same basis lb 43½ .48½
Hexane, industrial, tankcars, New Jersey and New York, g.l. .20 - —
Houston, Texas gal. .16 - —
1-Hexanol dms. c.l. works lb .35 - —
dms. l.c.l. works lb .35¾- —
tanks works lb .33 - —
Hexyl cinnamic aldehyde, dms lb 4.00 7.50
n-Hexyl methacrylate, dms., c.l., works lb .75½- —
dms. l.c.l. works lb .76 - —
Hexyl salicylate dms. lb 1.75 - —
Hexylene glycol, dms. c.l. dlvd lb .17½- —
dms. l.c.l. dlvd lb .19 - —
tanks, dlvd lb .15 - —
Hexylresorcinol USP dms., 25-lb. lots or more dlvd lb.14.00 - —
dms. smaller lots dlvd. lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal 17-18% ammonia, bulk, c.l. Chicago unit-ton 6.75 - —
Horehound herb, bls lb. .18 - .20
Hydrastis (see Goldenseal)
Hydrazine hydrate, 85% ref. dms., works lb 1.35 - 1.55
100% ref. dms., works lb 1.60 - 1.90

Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd zone 1 lb. .29¼- —
dms. l.c.l., dlvd zone 1 lb. .29¾- .30¼
tanks dlvd zone 1 lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo, Idaho, Mont., Nev., N M., Ore., Utah, Wash. Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys. frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works frt. equald ton.28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs. 3.15 - —
tanks, works frt. equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks works frt. equald ton.35.00 - —
CP, USP, consumers cbys., extra, c.l., works lb. .15¾ - —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l., same basis lb. .20¾- —
Hydrocortisone acetate bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocortisone alcohol bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd. 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.13.40 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

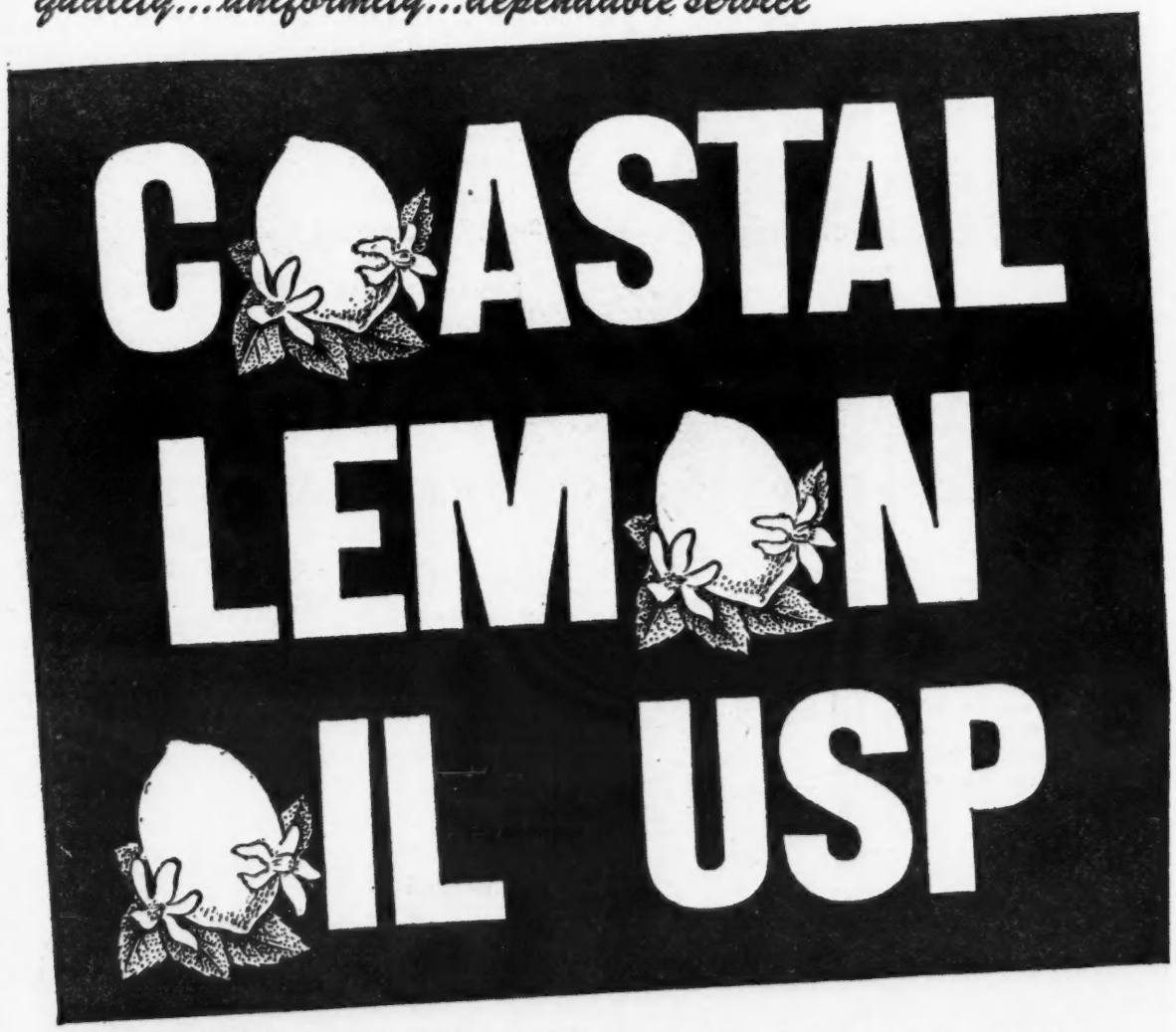
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30¼- .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .18 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —

Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l., dlvd. lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd. lb. 2.59 - —
dms., l.t.l., dlvd. lb. 2.61 - —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellol, cns. lb. 4.85 - 5.70
Hydroxyethyl cellulose, all grades, fib. dms., 20,000-lb lots or more, f.o.b. shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis lb. .93 - —
fib dms., smaller lots, same basis lb. 1.03 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works lb. 1.95 - —
NF, 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots lb.14.75 -18.25
Inositol, bots, dlvd. lb. 5.00 - —
dms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.60 - —
dms., 100-lbs., same basis lb. 5.05 - —
a-Ionone, cns. lb. 4.60 - 5.75
b-Ionone, cns. lb. 4.15 - 5.15
Ipecac root, whole, bgs lb 8.00 - 8.50
Powd., bbls, bxs. lb 9.50 -10.00
Irish moss, bleached, prime, bls lb. .20 - .23
Iron blue, alkali-resisting, bbls., c.l., dlvd E lb. .57 - —
bbls. l.c.l. ton lots same basis, lb. .58 - —
bbls. smaller lots same basis lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E lb. .52 - —
bbls. l.c.l., ton lots, same basis lb. .53 - —
bbls. l.c.l., smaller lots, same basis lb .54 - —
Imp., British, reg., bbls., c.l., dlvd. E. lb. .48 - —
bbls., l.c.l., ton lots same basis lb. 49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l. works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlenem Easton E. St. Louis, New York City lb. .14¼- —
Iron oxide red nat. 75-85% ferric oxide, bgs. c.l. works lb. .06¼- —
bgs. l.c.l., works lb. .06½- —
Iron oxide Spanish red bbls. c.l., ex dock lb. .05¼ Nom.
bbls. l.c.l. ex dock lb. .06 Nom.
bbls. l.c.l. ex whse New York, lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type bgs. l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades same basis lb. .12 - —
Isoamyl alcohol, dms. c.l. works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb .29 - —
tanks, same basis lb .25 - —
Isoborneol, cns. lb 1.44 - 1.80
Isobornyl acetate, cns. lb. .46 - .56
Isobornyl formate, dms. lb. 1.20 - —
Isobornyl proprionate, dms. lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l. same basis lb. .16¾- —
tanks same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutylene, 99%, tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms. l.c.l., dlvd lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd. lb. .52 - —
dms., l.c.l., same basis lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36½- —
t.c., t.t., same basis lb. .33 - —
Isoeugenol, cns. lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo.18.00 - —
Isonicotinic acid, 100-lb. fib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E lb. .25 - —
tanks, dlvd E. lb. .21 - —
Isopentane, comi. grade, tanks, f.o.b. Texas refy gal. .15½- —
Isophorone, dms. c.l., works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms. l.c.l. same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l. dlvd gal. .58 - —
dms., l.c.l., dlvd gal. .68 - —
tanks, dlvd. gal. .42 - —

quality...uniformity...dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

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Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Isopropyl alcohol, refd., 95%, c.l., dms., dlvd	gal.	.60	—
dms., l.c.l., dlvd	gal.	.70	—
tanks, dlvd	gal.	.44	—
anhyd., c.l., dlvd	gal.	.62	—
dms., l.c.l., dlvd	gal.	.72	—
tanks, dlvd	gal.	.46	—
Isopropyl benzene (see Cumene).			
Isopropyl ether, dms., c.l., dlvd	lb.	.09½-	—
dms., l.c.l., dlvd	lb.	.11	—
tanks, dlvd	lb.	.07	—
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works	lb.	1.00	—
dms., l.c.l., works	lb.	1.05	1.25
tanks, works	lb.	.99	—
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works	lb.	.75	—
450-lb fib dms., l.c.l., works	lb.	.80	.90
Isoquinoline, dms., works	lb.	.65	1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works	lb.	.53½-	—
bgs., l.c.l., same basis	lb.	.54½-	—
Tech., bgs., c.l., same basis	lb.	.38½-	—
bgs., l.c.l., same basis	lb.	.39½-	—

J

J acid, paste, bbls., works, 100% basis	lb	2.70	—
Powd. bbls. same basis	lb	2.75	—
Jalap root, NF, bls.	lb.	.60	—
NF, powd., bbls., bxs.	lb.	.70	.75
Japan wax, cs	lb.	.27	.29
Juniper berries, bgs	lb.	.16	.17
Juniper berry oil, NF, bots	lb.	2.90	3.75
Twice rectified bots.	lb.	3.25	—
Juniper tar oil NF dms	lb.	.42	.60
Juniper wood oil, tech., cns.	lb.	.38	.55

K

Kaolin (see also Clay, China).			
Kaolin, NF, powd., fib. dms.	lb.	.10	.12
NF, colloidal, 50-lb. bgs	lb.	.15½-	.17½
Karaya gum No. 1, NF powd. bls	lb.	.45	.48
No. 2, powd., bbls.	lb.	.40	.42
No. 3, powd. bbls	lb.	.35	.37
Koch acid, bbls., frt. alld., 100% basis	lb	1.00	—
Kola nuts, bgs.	lb.	.13	.15

L

L acid, bbls., works	lb.	1.35	—
Lacquer diluent, petroleum, 140°F-200°F b.r., tankcars, New Jersey and New York	gal.	.20	—
Group 3	gal.	.15125-	—
Houston, Texas	gal.	.16	—
200°F-240°F b.r., tankcars, New Jersey or New York	gal.	.20	—
Group 3	gal.	.14125-	—
Houston, Texas	gal.	.16	—
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald	lb.	.1985-	—
bbls., dms., 20 or more, frt. equald	lb.	.2035-	—
bbls. dms. 5 to 19 frt equald.	lb.	.2085-	—
bbls., dms., 1 to 4, frt. equald.	lb.	.2135-	—
80%, bbls., c.l., dms., frt. equald	lb.	.3335-	—
bbls., dms., 20 or more, frt. equald	lb.	.3385-	—
bbls. dms. 5 to 19 frt equald.	lb.	.3435-	—
bbls., dms., 1 to 4, frt. equald.	lb.	.3485-	—
Plastic grade, 50%, c.l., bbls., works	lb.	.2740-	—
bbls. 20 or more works	lb.	.2790-	—
bbls. 5 to 19, works	lb.	.2840-	—
bbls. 1 to 4, works	lb.	.2890-	—
80%, bbls. c.l. works	lb.	.4623-	—
bbls. 5 to 19, works	lb.	.4723-	—
bbls. 1 to 4 works	lb.	.4775-	—
Tech., 44%, bbls., c.l., works, 100 lbs.		12.45	—
bbls., l.c.l., works	100 lbs.	12.85	—
USP, 85% cbys.	lb.	.85	—
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald	lb.	.14	—
bgs., 6,000-lb lots, frt equald	lb.	.14½-	—
bgs., 2,000-lb. lots, frt equald	lb.	.14¾-	—
bgs., 200-lb lots, frt equald	lb.	.15¼-	—
Edible lactose in 6lb. dms., ½c. higher.			
Lactose, ferment grade, bgs., c.l., works	lb.	.08½-	—
USP, reg., fib. dms., 30,000-lb. lots, frt. equald	lb.	.21½-	—
fib. dms., 2,000-lb lots, frt. equald	lb.	.22¼-	—
200-1,880-lb. lots, frt. equald	lb.	.22¾-	—
USP lactose in bags ½c to 1c lower			
Lactose, USP, spray dried, bgs., t.l., frt. equald	lb.	.18½-	—
bgs., l.c.l. frt. equald	lb	.19	.19¼
Lady's slipper root, bls	lb.	3.00	3.50
Lake C red toner, alizarine, bbls., works	lb.	1.25	—
Lamp black, bgs. c.l., works	lb.	.16	.45
Lanolin, USP, anhyd., 400-lb. dms., works	lb.	.24	.26
USP, anhyd., cosmetic, 400-lb. dms., works	lb.	.26	.30
USP, hydrous, 400-lb. dms., works.	lb.	.24	—
Lard, cash, dms., Chicago	lb.	.09¼-	—
Lard oil (see Grease oil).			
Larkspur seed, bgs	lb.	.40	.45
Laurel leaf oil, dms. cns.	lb	9.75	12.50
Laurent's acid, bbls	lb.	.70	—
Lauric acid, pure, dms.	lb.	.38½-	.41
tanks	lb.	.36	.37
Lauryl alcohol, bots.	lb.	2.00	2.50
n-Lauryl methacryiate, dms., c.l., t.l. works	lb.	.65½-	—
dms., l.t.l., works	lb.	.66	—
Lavandin oil, 22-24%, dms.	lb	1.10	1.50
Abrial, dms.	lb	1.00	1.50
Lavender flowers, medium, bls	lb.	.55	.60
Ord., bls.	lb.	.20	.25
Select., bls.	lb.	.90	1.00
Lavender flower oil, USP, French 35-37% ester, cns.	lb.	1.85	4.00
40-42% ester cns	lb	5.00	7.75
Spike, Spanish, cns	lb.	2.20	3.00
Lead acetate, NF cryst., gran., powd., bbls	lb.	.34½-	—
White, cryst., bbls.	lb.	.25½-	—
gran., bbls.	lb.	.26½-	—
powd. bbls.	lb.	.26½-	—
Lead arsenate acid powder, dealers, 3-50 lb. bgs or any quantity, frt. alld, on $150 or more	lb.	.30¼-	—
1-lb. bgs., same basis	lb.	.47	—
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt alld.	lb.	.17	—
bbls., l.c.l. same basis	lb.	.18	—
Lead carbonate (see Lead, white, basic carbonate).			
Lead chloride, dms.	lb.	.33	—
Lead iodide NF V jars	lb	3.83	—
Lead linoleate, fused, 26% Pb, dms.	lb.	.36	—
Lead metal, prime, pigs, New York	lb.	.12½-	—
St. Louis	lb.	.1230-	—
Lead monosilicate, bgs., c.l., works, frt. equald	lb.	.1385-	—
bgs., l.c.l., same basis	lb.	.1485-	—
Lead naphthenate, liq., 16% Pb, dms., dlvd	lb.	.19½-	—
24% Pb, dms., dlvd	lb.	.24½-	—
Solid, 37% Pb, dms., dlvd	lb.	.31¾-	—
Lead nitrate, bbls.	lb.	.24½-	.26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works	lb.	.29¾-	.34¼
Lead peroxide, tech. powd. bbls	lb.	.45	.50
Lead phthalate, dibasic dms., works.	lb.	.41	—
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald.	lb.	.1425-	—
bbls., l.c.l., same basis.	lb.	.1525-	—
97% Pb_3O_4, bbls., c.l., same basis	lb.	.1445-	—
bbls, l.c.l., same basis	lb.	.1545-	—
98%, Pb_3O_4, bbls., c.l., same basis	lb.	.1460-	—
bbls., l.c.l., same basis	lb.	.1560-	—
Lead resinate, precip. 23% Pb, dms., ton lots, dlvd	lb.	.43¾-	—
Lead salicylate, normal, dms. works.	lb.	.46	—
Lead silicate (see Lead white basic silicate).			
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld	lb.	.20	—
bgs., l.c.l., same basis	lb.	.21	—
Lead sulfate (see Lead blue basic sulfate).			
Lead tallate, liq., 16% Pb, dms.	lb.	.17¼-	—
24% Pb, dms	lb.	.26¾-	—
Solid, 30% Pb, dms.	lb.	.23¼-	—
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld	lb.	.18	—
bgs., l.c.l., same basis	lb.	.19	—
basic silicate, bgs., c.l., shipt. pt., frt. alld.	lb.	.16½-	—
bgs., l.c.l., same basis	lb.	.17½-	—
basic silicate, bgs., c.l., shipt. pt., frt. alld.	lb.	.17	—
bgs., l.c.l., same basis	lb.	.18	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works.	lb.	.14	.15
non-ret. dms., l.c.l., same basis	lb.	.15	.16
unbleached, non-ret. dms., c.l., same basis	lb.	.13	.14
non-ret. dms., l.c.l., same basis	lb.	.14	.15
Lemon bioflavonoid complex, 100-lb. package, works	lb.	6.45	—
Lemon oil, USP, Calif., cns., dms.	lb.	1.40	1.50
Messina, cns.	lb.	3.75	5.00
Lemongrass oil, cns., dms.	lb.	2.00	2.55
dl-Leucine, dms., works	lb.	12.25	15.00
Licorice root, gran., bls.	lb.	.13	—
Powd., bls.	lb.	.15	.16
Whole, bls.	lb.	.09	.10
Lignaloe wood oil, Mexican, cns.	lb.	2.75	3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate).			
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E.	ton.	14.25	—
Chemical, hydrated, bgs., c.l., same basis	ton.	17.25	—
Chemical, spray, bgs. c.l., same basis	ton.	18.25	—
For New York delivery, add $6.29 freight charge			
Lime oil, dist., Mexican, cns.	lb	5.90	6.75
West Indian, cns.	lb.	6.50	7.80
Expressed, West Indian, cns	lb.	7.75	8.75
Lime salts (see Calcium).			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Linalool, ex bois de rose oil, dms.	lb	2.90	3.75
Syn., 98-100% dms., works	lb	3.20	3.60
Linalyl acetate, ex bois de rose, 90-92%, dms	lb.	2.75	3.40
96-98%, dms.	lb.	3.25	—
Syn., 98-100%, dms., works	lb	3.40	—
Lindane, 25% formulation to distributors dms., frt alld	lb	1.35	1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd	lb.	2.13	—
100-lb. dms., 5,000-lbs, dlvd	lb.	2.15	—
250-lb. dms., less than 5,000-lbs., dlvd	lb.	2.18	—
100-lb. dms., less than 5,000-lbs., dlvd	lb.	2.20	—

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!

M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton.65.50 - —
Extracted, 34% bulk, same basis. ton.58.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1660- —
dms., l.c.l., New York lb. .1750- .18
tanks, f.o.b. Minneapolis lb. .13 - —
tanks, New York lb. .1411- —
tankwagon, New York lb. .1461- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid, dist., dms lb. .2010- —
Water-white, dms. lb. .2310- —
Litharge comi., powd. bbls., c.l., works, frt. equald lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lithium aluminum hydride, lump, dms. works lb.33.00 39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms. c.l., t.l. dlvd lb 1.29½ - —
dms., ton lots to t.l., dlvd lb 1.30 1.30½
Tech., dms., c.l., t.l., frt alld lb .67 - —
dms., ton lots, same basis lb. 73 - —
dms., smaller lots same basis. lb 79 - —
Lithium chloride CP, anhyd., dms., ton lots lb 1.23½ - —
Tech. anhyd., dms. c.l., t.l., dlvd. or works, frt alld lb 87 - —
dms., l.c.l., same basis lb .88 .92
Lithium citrate NF dms. ton lots lb 1.50 —
Lithium fluoride, dms., 20,000-lb lots, dlvd lb 2.15 — —
bbls., ton lots and more dlvd. lb 2.18½ - —
bbls., less ton lots, dlvd lb 2.23½ - —
Lithium hydride powd., dms. 500-lb lots or more works lb 9.50 - —
Lithium hydroxide, monohydrate, dms. c.l., t.l., frt alld lb 72 - —
dms. l.c.l. frt alld lb 73 - —
Lithium manganite cms. works lb. .95 1.05
Lithium nitrate tech. dms., 100-lb lots lb 1.15 1.25
Lithium salicylate, dms. lb 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate, dms. c.l., works. lb. .47½ - —
dms., ton lots, works lb. .48½ - —
dms., less-ton lots, works lb .53½ - —
Lithium sulfate, dms., 100-lb. lots. lb 1.15 1.25
Lithium titanate, dms., works lb 1.15 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls., works lb 1.47 - —
Lithopone, ord. bgs., c.l., dlvd E. lb. .08¾ - —
bgs. l.c.l. dlvd E lb. .0¾ - —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
lb .12 - —
bgs., l.c.l. dlvd. lb. .55 - —
Lobelia herb bls lb .75 - —
Loheline sulfate, bots., 50-oz. lots, works oz.30 00 - —
Locust bean gum, powd., bgs. lb. .35 - .40
Lycopodium, cs. lb. 3.25 - 3.50
1-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls lb. 1.90 - —
No. 2, whole, bls lb 1.65 - —
siftings, bls. lb. 1.60 - —
Mace oil, dist. cns., dms lb 9.75 - 12.25
Magnesia calcined tech bgs., cns., frt equald lb. .25¾ .26½
Tech., syn., rubber grade, light, bgs., c.l., frt equald lb. .28¾ .30
rubber grade, extra light, bgs., c.l., frt equald lb. .28 —
bgs., l.c.l., frt equald lb. .28¾ —
Above prices are quoted f.o.b works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton.39.50 - —
91%, bgs., c.l. same basis. ton.49.50 - —
95%, bgs., c.l., same basis. ton.59.00 - —
USP, light, bgs. lb. .36½ - .37½
USP, heavy, bgs. lb. .36½ - .37½
Magnesite, chemical grade, calcined, powd., bgs c.l., works, frt equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton.46.00 - —
Magnesium bromide cs. jars lb .95 1.00
Magnesium carbonate, tech., bgs., c.l., frt equald lb. .11 - —
bgs., t.l., frt equald lb. .11½ - —
bgs. l.c.l. frt equald lb. .13½ - .14
USP bgs., c.l., frt. equald lb. .13½ - —
bgs. t.l., frt. equald lb. .14 - —
bgs., l.c.l. frt equald lb. .15 - 16
Above prices are quoted f.o.b works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, dms. c.l., works lb. .12¾ - —
dms. l.c.l., works lb. .14 - .15
Hydrous, 98%, flake, bgs., c.l., works ton.55.00 - —
bgs. l.c.l., works ton.65 00 - 80 00
Magnesium gluconate, 100-lb. dm., f.o.b works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½ - .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½ - —
dms., t.l., frt. alld lb. .23½ - —
tanks, frt. alld lb. .21½ - —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼ - —
sticks, cs. works frt alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb. .10½ - .12
Magnesium sulfate tech., bgs., c.l., works 100 lbs 2.15 - —
bgs., l.c.l., works. 100 lbs. 2.90 - 3.15
USP, cryst., bgs. c.l. works. 100 lbs 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs 3.10 - —
bgs, smaller lots 100 lbs 3.35 - —

Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb lots lb. 40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.
Malachite green, straight, PTMA, bbls. works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 1.01
Maleic acid, cryst. powd., dms lb. .37¼ - —
Maleic anhydride, dms., c.l., frt. equald lb. .23½ - —
dms., l.c.l., frt. equald. lb. .25 - —
tanks, frt. equald lb. .22½ - —
Malic acid, tech., dms. lb. .50 —
Mandelic acid, NF, dms., 1,000-lb. lots lb 2.35 —
dms., smaller lots lb 2.40 2.50
Mandrake root, bls lb. .40 - —
Manganese acetate, dms. dlvd lb. .35 - —
Manganese borate tech. tib dms. lb. .23½ - —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾ - —
smaller lots, works lb. .23½ - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works ton.148 00 - —
40,000 to 99,999-lb lots paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite NF dms. lb. 3.52 - —
Manganese linoleate, liq. 4.35% Mn, dms lb. .35¾ - —
Solid, precip., 8.2% Mn. bbls lb. .41¼ - —
Manganese metal, electrolytic, dms., c.l., dlvd E. lb. .34 - —
dms., ton lots, dlvd E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn. dms. frt. alld lb. .29¾ - —
Manganese resinate, fused, 3½% Mn, dms lb. .29¼ - —
Precip., 6½-7% Mn, dms. lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S E. ton.97.50 - —
bgs., l.c.l., dlvd S E. ton.104.50 - —
Manganese tallate, 6% dms. lb. .26½ - —
Manila copal gum, C, bgs. lb. .35 .39
DBB, bgs. lb. .25 .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 .24
WS, bgs. lb No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dm., works lb .65 - —
Marine pitch, dms lb. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26 - —
bgs., l.c.l., works lb. .27½ - —
Menadione USP bots. gram. .044 .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .06¾ - —
Menthol, nat., USP, Brazilian, large crystals, cs lb. 8.25 - 9.00
Nat., USP, Brazilian, regular crystals, cs. lb. 8.50 - —
Japanese, cs. lb.12.00 - —
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide bgs., fib. dms. ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs. f.o.b works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b works lb 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis lb 6.14 - —
tech., bbls. 1,000 lb lots lb 5.58 - —
bbls. smaller lots lb 5.60 - —
Mercurous chloride (see Calomel)
Mercurous iodide, yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal, 76 lbs. per flask, net-flask215.00 - 217.00
Mesityl oxide, dms., c.l., dlvd. lb .15 —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb 12½ - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb 57 75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½ - —
dms., smaller lots, frt. equald. lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½ - —
dms., l.c.l., dlvd gal. .61½ - —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
Methanol, nat., zone 1, tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b terminal gal. .29 - —
Syn., zone 2, dms., c.l., or t.l., min., frt. alld or dlvd gal. .55½ - —
dms., l.c.l., works gal. .65½ - —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b works. frt. equald lb.27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb 1.10 - —
dms., l.t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt alld. 50-lb or more lb 3.50 - —
Feed grade 98% fib dms., same basis lb 1.55 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½ - —
non-ret dms. t.c.l. same basis lb .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½ - —
non-ret dms., l.c.l. same basis, lb .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W Va., N C., Ohio., Ky., Mich., Ind. Ill. Wis., St Paul and Minneapolis, Minn.; St Louis, Mo.; Miss., Ala., Ga., Fla., S C and Tenn
Methyl acetone, nat., dms., l.c.l., E of Miss., frt alld gal. 62½ - —
Syn., dms., c.l., frt. alld E gal. .66 - —
dms. l.c.l. frt alld E. gal. .76 - —
tanks, frt alld E gal. .51 - —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont. N Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l. dlvd. lb. .39 - —
dms., t.l., dlvd. lb. .40 - —
tanks, dlvd lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms. t.c.l. dlvd. E. lb 18½ - —
tanks, dlvd E. lb .14½ - —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb .18½ - —
tanks, dlvd. lb. .14½ - —
Methyl amyl ketone, dms. works. lb. 1.05 - —
N-Methylaniline tech. tanks frt alld lb. .60 - —
Methylanthranilate, cns. lb. 2.45 - 3.00
Methyl benzoate cns., dms. lb. .60 - .75
Methyl bromide service organization prices 40 to 375-lb. cyls., large lots, frt alld lb. .62 - .82
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb lots and more, same basis lb. .89 - —
50-lb bgs. smaller lots, frt. alld on 100 lbs lb 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs. c.l., frt alld lb. .69 - —
50-lb bgs. 2,000-lb lots and more, same basis lb. 76 - —
50-lb bgs. smaller lots, frt. alld. on 100-lbs lb. .79 .81
Methyl chloride, indust. cyls., frt. equald lb. .22¼ - —
tanks, multi-unit, same basis. lb. .16¼ - —
tanks, single unit, same basis. lb. .12¾ - —
Refrigerator mfrs., cyls., dlvd lb. .48¾ - —
Other consumers or service men, cyls. dlvd lb. 67¾ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 —
dms., t.c.l., works lb .45¾ - —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Methyl non-ret dms., any quantity works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb multiwall paper bgs., t.l., min 23,000 lbs., works lb. .21½ - —
100-lb multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots fb.28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb 1.90 2.09
Methyl ionone, standard, cns. dms. lb 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methyl methacrylate, dms., c.l., t.l., frt. equald with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31½ - —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Methyl parathion tech. 80% dms., frt. alld E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms. lb 6.90 - —
Methyl salicylate, dms. t.l., frt. alld lb. .60¼ - —
dms., t.c.l. same basis lb. .62½ - .67½
Methyl testosterone USP 100-gram bots gram No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.30 - —
5-39-dm. lots, same basis lb. 1.35 - —
tanks, same basis lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½ - —
dms., t.c.l., t.l., dlvd lb. .15¾ - —
tanks, 4,000-gal. min., dlvd. lb. .12¼ - —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼ - —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. 90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —

Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼ - —
bgs. t.c.l. ex-whse. lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E. lb. .08¼ - —
bgs. t.c.l., ex-whse, or freight alld. E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld. E lb. .08¾ - —
wallpaper bgs., c.l., works, frt. alld. E lb. .08¾ - —
bgs., ex-whse. or frt. alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs. works lb. .0160- .0673
Mineral oil, white tech. 50-65 vis., non-ret dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankcars, refy. gal. .49 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., l.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
non-ret. dms., l.c.l., same basis gal. .77 - —
tankcars, refy. gal. 56 - —
NF, 145-155 vis., non-ret. dms., c.l. same basis gal. .78 - —
non-ret. dms., l.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ - —
non-ret dms., l.c.l., same basis gal. .85½ - —
tankcars, refy. gal. .64½ - —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy. gal. .82½ - —
non-ret. dms., l.c.l. gal. .87½ - —
tankcars, refy. gal. .66½ - —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .87½ - —
non-ret. dms., l.c.l. gal. .92½ - —
tankcars, refy gal. .71½ - —
(For f.o.b. N. Y. add 2c. for tankcars, 2c. for c.l. and 3c. for l.c.l. non-ret. dms.)
Mineral orange, American, bbls., c.l., works lb. .1550- —
bbls., c.l., same basis lb. .1650- —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
Mink oil, dms lb. 2.75 - —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb 6.30 —
Molasses, blackstrap, teeo grade, tanks, New Orleans gal. .08¾ - .09
tanks, New York gal. .13½ - —
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd. 80 or 200 mesh, ctns., works kilo 7.84 - —
325 mesh ctns., works kilo 9.13 - —
Molybdenum trioxide, purif., dms., works lb 1.15 - —
Tech. chemical dms. works, basis Mo. content lb 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works lb 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd E. of Rockies lb. .57½ - —
dms., t.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono)
Monochlorobenzene, dms. c.l., frt. alld or dlvd E lb. .10½ - —
dms., t.c.l., same basis lb. .11½ - —
tanks, same basis lb. .09¾ - —
Monoethanolamine, dms. c.l. dlvd, E lb. .27½ - —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis lb. .38½ - —
dms., t.c.l. dlvd. E, 100% basis, lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd E lb. .27½ - —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. 25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½ - —
dms., t.c.l. same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., t.c.l. frt equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., t.c.l., frt. equald., 100% basis lb. .36½ - —
tanks, frt. equald., 100% basis, lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., t.c.l., frt. equald., 100% basis lb. .33½ - —
tanks, frt. equald, 100% basis lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., t.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms, 100-lb lots, same basis lb 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd lb. 1.00 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
Imp., crude, Bohemian, bgs. lb. .22 - .24
German, bgs. lb. .26 - .27

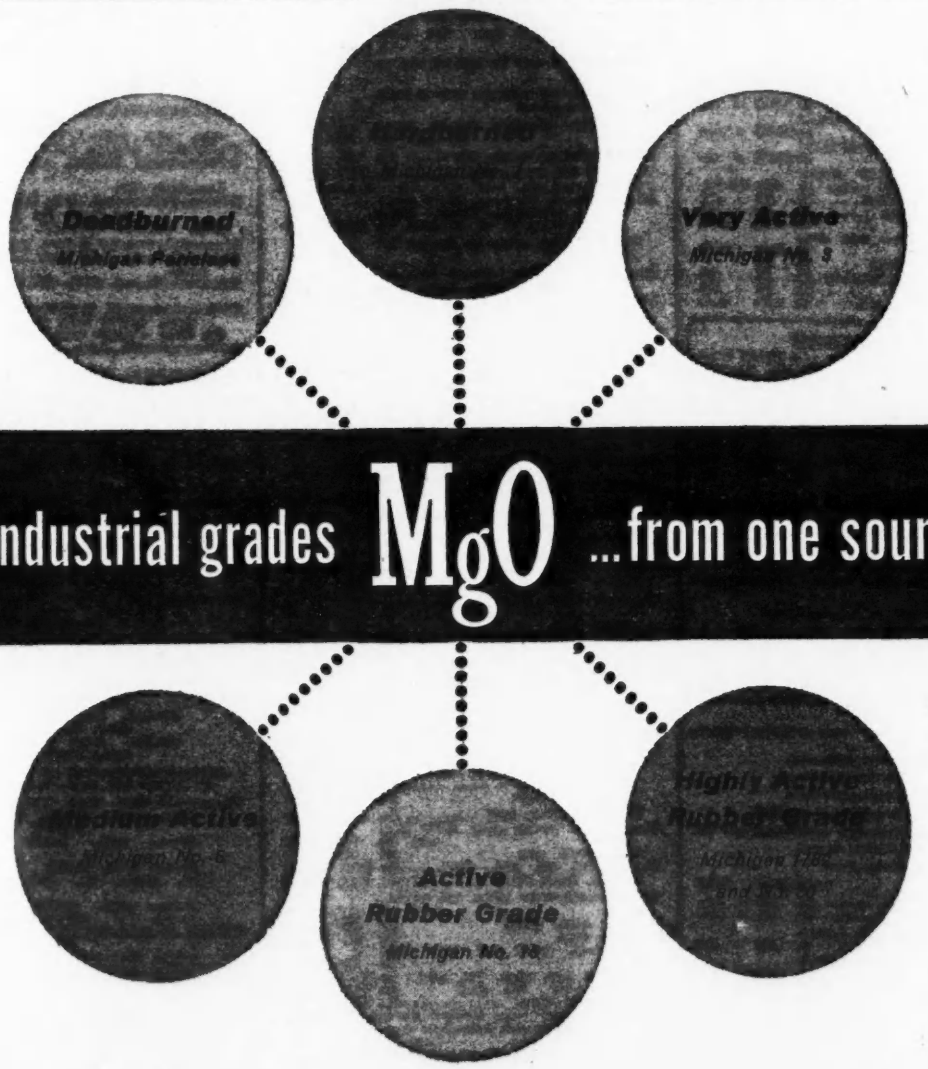
Morphine, cns., 100-oz., f.o.b. works oz.12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morpholine, dms., c.l., divd. E lb. .55½- —
dms., l.c.l., divd. E lb. .56½- —
tanks, divd. E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb 4.60 5.10
cns., 25-lb. lots lb 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb. lots lb. 1.40 - —
Mustard seed, Danish yellow, bags. lb. .11½- —
Montana, yellow, bgs. lb. .10½- —
Oriental, bgs. lb. .08 - —
Mustard oil, syn. bots. lb 1.60 1.85
Myristic acid, bgs. lb. .31 - .33
tanks lb. .30½- .32
Myrrh gum, cs. lb. .65 - .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum:
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .05 - .06
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12¼- —
tanks, same basis lb. .09¾- .10¾
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l., same basis, lb. .15¾- —
1-lb. pkgs., c.l., same basis, lb. .18½- —
a-Naphthol, dms., frt. alld. lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 - —
bbls., l.c.l., works lb. .36 - —
Naphthol, ITR, red toner, bbls., works lb. 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfome acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld. lb. .50 - —
b-Naphthylamine, tech. flake, bbls., works lb. 1.00 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 - -
Neatsfoot oil, 15° cold test, dms. lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms. gram. .13½- —
Neopentylglycol, dms., c.l., divd. lb. .32 - —
dms., l.c.l., same basis lb. .33 - —
Neroli oil, NF, French, bots. lb.425.00 -575.00
Tunisian, bots. lb.400.00 - —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., divd. lb. .68½- .75½
Nickel carbonate, bbls., divd. lb. .78¼- .85¼
Nickel chloride, bbls., divd. lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb. .74 - —
Nickel nitrate, dms., frt. alld. lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., divd. lb. .28 - —
bgs., l.c.l., divd lb. .28½- .30
Nicotinamide, USP, 50-kilo dm., frt. adjusted kilo. 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - —
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb 1.03 - —
Nicotinic amide USP (see Nicotinamide).
Niger seed, bgs lb. .10¼- —
Niketham ide cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 - —
cbys., l.c.l., works E. 100 lbs. 6.05 - 6.65
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., l.c.l., works E. 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., l.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys., l.c.l. works E. 100 lbs. 7.55 - 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l., works lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra cs., l.c.l., same basis lb. .24 - .25
4-Nitro-2-aminophenol, tech., paste, dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 - .51
dms., l.t.l., frt. alld. lb. .51 - .53
o-Nitroaniline orange toner, kegs. lb. 1.35 - —
p-Nitroaniline, dms. frt. alld. lb. .445 - .47
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .13 - —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., l.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-33 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls. c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
18-20, cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 - .46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls, c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l. same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., divd. lb. .88 - —
Nitroethane, dms., c.l., divd. E lb. .25 - —
dms., l.c.l., divd E lb. .26½- —
tanks, divd. E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N. unit. 1.28 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va. lb. .065 - —
Clys., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., l.c.l., l.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works. unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 3.50 - .50
Nitromethane, dms. t.l., divd. E lb. .25 - —
dms., l.t.l., divd E lb. .26½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l., frt. alld. lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .15 - —
dms., l.c.l., frt. alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., l.c.l. frt. alld. lb. .23 - —
tanks, frt. alld. lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.38 - —
West Indian, bgs. lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75
West Indian, cns. lb. 9.50 -12.75
Nux vomica, bis lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .48 - .58
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾- —



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M-60-8

I-Octanol, tech., dms. c.s., dlvd., Zone 1	lb.	43½-	—
dms., l.c.l., dlvd. Zone 1	lb.	.45½-	—
tanks, dlvd., Zone 1	lb.	.41 -	—
Octyl alcohol, perfumers' grade, bots	lb	1.60	3.25
Octyl alcohol, tech. (see I-Octanol, tech)			
tert-Octylamine, dms., c.l., t.l., f.o.b. works	lb.	.54½-	—
dms., l.c.l., same basis	lb.	.55 -	—
Octyl phenol, bgs., c.l., works	lb	22	—
bgs., l.c.l., works	lb	.22½-	—
tanks, work	lb	.21	—
Octyl phenol in dms. 11c higher			

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms.	lb.	.16¼-	.16¾
tanks	lb.	.14¼-	.14½
Oleic acid, dbl.-dist. (white), dms.	lb.	.17½-	.20
tanks	lb.	.15 -	—
S. d., dms	lb.	.16¼-	.18¾
tanks	lb.	.13¾-	—
Oleo oil, extra, dms	lb.	.14 -	.14¼
Oleostearine, dms.	lb.	.13 -	.13¼
Oleum (see Sulfuric acid fuming)			
Olibanum gum, siftings, cs.	lb	.15 -	.20
Fears cs	lb	22	.30
O. ...num oil bots	lb	5.00	7.65
Extra fine bots	lb	8.00	9.50
Olive oil edible dms. spot, duty paid	gal.	2.30 -	2.40
Olivine crude works	ton	12.00	—
20 mesh works	ton	15.00	—
100 mesh works	ton	20.00	—
Opium gum, USP, cns., 25-lbs., f.o.b. works	oz.	19.20 -	—
gran., cns., 50 lbs., same basis	oz.	21.65 -	—
powd., cns., 50 lbs., same basis	oz.	21.65 -	—
Orange oil expressed USP Brazilian cns. dms	lb	No stocks	
California, cns., dms	lb.	.70 -	.90
Florida, cns., dms.	lb.	.50 -	.60
Messina cns	lb	4.25	5.00
West Indian bitter cns. dms	lb	2.50	3.25
Sweet, dist., cns. dms	lb	.60	—
Orange peel, bitter, Haitian, bls	lb.	.18 -	.20
Sweet	lb.	.28 -	.30
Origanum oil, Spanish cns	lb	1.80	2.30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, Florentine, bls.	lb.	.55 -	—
powd. bbls. bxs	lb	65 -	—
Verona bls.	lb	35 -	—
powd. bbls. bxs	lb	45 -	—
Ortho anisidine (see o-Anisidine).			
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)			
Orthochloroaniline (see o-Chloroaniline).			
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)			
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)			
Orthochlorophenol (see o-Chlorophenol).			
Orthocresol (see o-Cresol)			
Orthocresotinic acid (see 2,3-Creosotic acid).			
Orthodichlorobenzene (see o-Dichlorobenzene).			
Orthonitroaniline (see o-Nitroaniline)			
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)			
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)			
Orthonitrophenol (see o-Nitrophenol).			
Orthonitrotoluene (see o-Nitrotoluene).			
Orthophenetidine (see o-Phenetidine).			
Orthophenylphenol (see o-Phenyl phenol).			
Ortho-tertiary amylphenol (see o-tert-Amylphenol)			
Orthotolidine (see o-Tolidine base).			
Orthotoluidine (see o-Toluidine).			
Ouabain USP bots., gram		3.00	4.00
Oxalic acid, bgs. dms. c.l., works	lb.	.18 -	.18½
bgs. dms., 10,000-lb lots, works	lb.	.18¼-	.18¾
bgs. dms., smaller lots, works	lb.	.19¼-	.19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld.	lb.	.912 -	—
Dyestuff manufacture, dms., same basis	lb.	1.03 -	1.14
Oxyquinolin sulfate, cns., 100 lb lots, works	lb	4.75	5.00
cns., smaller lots, works	lb.	4.92	5.17

P

Palm oil, clarif., dms.	lb.	.14 -	.15
tanks	lb.	.11¾-	—
Palm oil acid, dist., dms.	lb.	15¾	19¼
tanks	lb	13¾	14¼
Palmarosa oil, cns	lb.	4.45 -	6.00
Papain, powd., bots.	lb.	5.50	10.00
Papaverine hydrochloride, nat. or syn., USP cns. 25-oz to 100-oz lots	oz	5.00	—
cns., smaller lots	oz	5.05	5.20
Papaverine sulfate, nat. or syn., USP, cns.,	oz	7.10	7.35
Paprika, Bulgarian bgs	lb.	.34	.35
Hungarian, bgs.	lb.	.32 -	—
Spanish, bgs.	lb	.50	—
Yugoslavian, bgs.	lb	.34	—
Para-aminobenzoic acid (see p-Aminobenzoic acid)			
Parachlorobenzoic acid (see p-Chlorobenzoic acid).			
Para-methylphenylcinchonic acid (see Neocinchophen)			
Paranitrobenzoic acid (see p-Nitrobenzoic acid)			
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid)			
Para-aminophenol (see p-Aminophenol).			
Parrchloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)			
Para-anisidin (see p-Anaidine).			
Parachloraniline (see p-Chloraniline).			
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)			
Parachlorophenol (see p-Chlorophenol).			
Paracresol (see p-Cresol)			
Paradibromobenzene (see p-Dibromobenzene).			
Paradichlorobenzene (see p-Dichlorobenzene)			
Para toner, red, bbls.	lb.	1.36 -	—
Chlorinated, kgs	lb.	1.35 -	—
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy.	lb.	.0655-	—
Paraffin, fully refd., 122°-124°F, ASTM,, tanks, refy	lb.	.0765-	—
125°-127°F. ASTM, tanks, refy.	lb.	.0765-	—
130°-132°F, ASTM, tanks, refy.	lb.	.0765-	—
132°-134°F., ASTM tanks, refy.	lb.	.0765-	—
135°-137°F., ASTM, tanks, refy	lb.	.0765-	—
AMP temperatures are an arbitrary 3°F higher than ASTM			
Paraffin oil, pale, 100-110 vis., at 100°F. tanks, east coast refy	gal.	.14 -	—
Paraffin wax (see Paraffin)			
Paraformaldehyde 91% flake, bgs., c.l., frt. alld	lb.	.10 -	—
bgs., l.c.l., frt. alld	lb.	.12 -	.13
91%, powd., bgs., c.l. ex whse.	lb.	.1715-	—
bgs., l.c.l., ex whse	lb.	.1865-	—
USP-X, fib dms., c.l	lb.	.19 -	—
fib dms. 1,000-lb. lots	lb	20 -	—
fib dms., smaller lots	lb.	.21½-	—
Paraldehyde, tech., 98% 55-gal. dms. t.l. dlvd	lb.	.14 -	—
55-gal. dms., l.c.l., dlvd	lb.	.15 -	—
tanks, dlvd	lb.	.11½-	—
Paranitroaniline (see p-Nitroaniline).			
Paranitrochlorobenzene (see p-Nitrochlorobenzene)			
Paranitrotoluene (see p-Nitrotoluene.			
Paranitrophenol (see p-Nitrophenol).			
Paraphenetidine (see p-Phenetidine).			
Paraphenylenediamine (see p-Phenylenediamine)			
Paraphenylphenol (see p-Phenylphenol)			
Para tertiary amylphenol (see p-tert-Amylphenol)			
Para tertiary butylphenol (see p-tert-Butylphenol)			
Parathion ethyl, dms. frt. alld.	lb	.84 -	—
Parathion prices 2c per lb higher in West			
Paratoluenesulfonamide (see p-Toluenesulfonamide)			
Paris green dealers 100 lb. dms., frt alld	lb.	.45 -	—
Passion flower herb, bls	lb.	.45 -	.50
Patchouli oil, imp., cns	lb.	5.50 -	6.50
Peach kernel oil, USP (see Apricot kernel oil)			
Peacock blue fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies	lb	1.00 -	—
Peacock blue price 1c higher W of Rockies			
Peanut meal, 45% old process, bgs., f.o.b., mills	ton.	55.00	-56.00
Peanut oil crude, tanks f.o.b mills	lb.	.17 -	—
Refd., dms.	lb.	.22¼-	.22½
tanks	lb.	.20¼-	—
Pectin dom NF citrus powd. bbls	lb	2.05	2.06
Dom., tech., powd., 150 jelly grade, bbls	lb.	1.28 -	—
Imp., Danish, bbls. ex whse	lb.	1.28 -	—
Pelargonic acid, dms., c.l., dlvd	lb.	.25 -	—
ton lots, same basis	lb.	.27½-	—
tanks, same basis	lb.	.23½-	—
Penicillin potassium cryst., bulk, 1,000,000 units.		.021 -	—
Penicillin procaine cryst., bulk, 1,000,000 units.		.023 -	—
Pennyroyal oil USP imported cns.	lb.	2.25	3.10
Pentachlorophenol, bgs. c.l., t.l., works, frt equald	lb.	.21	—
bgs., l.c.l., same basis	lb	22½-	.29
Pentachlorophenol in dms 1c higher.			
Pentaerythritol, tech., bgs., c.l., dlvd	lb.	.31 -	—
bgs., l.c.l., dlvd	lb.	.32 -	—
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol)			
Pentane, indust. tanks f.ex refy.	gal.	.14 -	—
Pentobarbital dms. 100 lbs. or more	lb	3.00	—
Pepper, black, Malabar, bgs.	lb.	.57½-	—
Lampong, bgs.	lb.	.57½-	—
Red, Funtuas, bgs.	lb.	.32 -	—
Japanese, Bontoka, bgs.	lb.	.37½-	—
Santaka, bgs.	lb.	.31½-	—
Sudanese, bgs.	lb.	.36 -	—
White, Muntok, bgs.	lb.	.92 -	—
Peppermint leaves dom. USP bls., dms	lb.	.70	.75
Imp. USP bls	lb	.85	—
Peppermint oil, nat., dms.	lb.	4.00 -	4.60
Redist., USP, dms.	lb.	4.25 -	5.25
Perchloroethylene dms. c.l. or t.l., dlvd	lb.	.13½-	—
dms., l.c.l., dlvd	lb.	.15¼-	—
tanks, dlvd.	lb.	.11¾-	—
tanktruck 1,000 gal min dlvd.	lb.	.12¼-	—
Peri acid, dry bbls. frt. alld	lb	1.60	—
Paste bbls frt. alld	lb	1.55	—
Peru balsam, dms.	lb.	1.30 -	1.45
Persic oil USP (see Apricot kernel oil).			
Petitgrain oil South American cns.	lb.	2.50 -	3.25
Petrolatum cream dms. c.l. refy	lb.	.08125-	—
dms., l.c.l. dlvd.	lb.	.10125-	.11375
tanks refy	lb.	.05875-	—
Extra amber, dms., c.l., refy.	lb.	.07125	—
dms., l.c.l. dlvd.	lb	.09125-	.10375
tanks, refy	lb	.04875-	—
Lily white, dms., c.l. refy	lb.	.08625	—
dms. l.c.l. dlvd.	lb	.10625	.12
tanks refy	lb	.06735	—
USP, snow white, dms., c.l., refy.	lb.	.09125 -	—
dms., l.c.l., dlvd	lb.	.11125-	.125
tanks, refy	lb	.06875-	—
USP, soft yellow, dms., c.l., refy.	lb.	.07125-	—
dms., l.c.l. dlvd	lb.	.095	.10375
tanks, refy	lb.	.04875-	—
Petroleum pitch (see Asphalt, petroleum)			

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms. c.l., works	lb.	.16¼-	.18¾
non ret dms. l.c.l. works	lb.	.17½	.19
tanks, works	lb.	.14¼-	.17
50-55%, sulfuric content, non-ret. dms., c.l., works	lb.	.16 -	—
non-ret dms. l.c.l. works	lb.	.17 -	—
tanks works	lb.	.13 -	—
o-Phenetidine, dms. c.l. frt. alld.	E lb.	.91 -	—
dms. l.c.l., same basis	lb.	.93 -	—
p-Phenetidine, dms., c.l., frt. alld.	lb	1.05 -	—
dms same basis	lb	1.08 -	—
Phenobarbitol, USP, dms., 100-lbs., frt. alld	lb.	3.25 -	—
Phenobarbital-Sodium (see sodium phenobarbital)			
Phenol, 90-92% (cresol 8-10%) non-ret. dms., frt. alld. E of Rockies	lb.	.16¾-	—
non-ret. dms. l.c.l., same basis.	lb.	.17¾-	—
tanks, same basis	lb.	.14¾-	—
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis	lb.	.16½-	—
non ret. dms., l.c.l., same basis.	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
Phenolphthalein, USP or yellow, 250-lb dm. 2,000 lbs. frt. alld.	lb.	1.30 -	—
250-lb. dm., same basis	lb.	1.35 -	—
Phenothiazine drench fib dms. t.l., dlvd	lb	.44 -	—
fib dms. t.t.l., same basis	lb.	.47 -	—
NF, fib. dms., t.l., same basis	lb.	.43 -	—
fib dms. t.t.l. same basis	lb.	.46 -	—
Phenyl acetate, dms. 100-lb. lots, works	lb	.50 -	—
Phenyl salicylate (see Salol).			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.35 -	—
100% bots	lb	4.00	4.65
Phenylacetic acid, pure, cryst. cns.	lb	1.25	1.75
dl-Phenylalanine, dms works	lb.	27.00	-37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms 200-lb lots dlvd E	lb	3.45 -	—
fib dms. smaller lots, dlvd E	lb	3.80 -	—
N-Phenyldiethanolamine dms., c.l., dlvd E	lb.	.41 -	—
dms. l.c.l., dlvd. E	lb.	.42½-	—
tanks, dlvd. E	lb.	.38½-	—
m-Phenylenediamine, dms. frt alld.	lb.	1.10 -	—
o-Phenylenediamine, comi., fib. dms., 100 to 1,000 lbs., works	lb.	1.70 -	1.80
p-Phenylenediamine, tech., dms., works	lb.	1.55 -	—
Phenylethanolamine, dms., c.l., works	lb.	.75½-	—
dms. l.c.l., same basis	lb.	.77 -	—
Phenylethyl acetate bots.	lb.	1.25 -	1.40
2-Phenylethyl alcohol, extra, dms.	lb	1.14	1.50
Standard dms.	lb	1.10	1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt alld	lb.	1.50	—
dms. smaller lots, frt. alld	lb.	1.70	1.85
Phenylethylphenyl acetate bots	lb	4.00	4.25
Phenylglyconic acid (see Mendelic acid)			
Phenylhydrazine, 97%, 450-lb dms.	lb	1.45 -	—
1-Phenyl-3-methyl pyrazolone-5, fib dms. 250-lb lots, dlvd E	lb	1.80 -	—
fib dms. smaller lots, dlvd E	lb	2.10 -	—
o-Phenylphenol, dms., l.c.l. works.	lb	.48	.50
p-Phenylphenol, bgs., c.l., works	lb	.38½-	—
bgs. l.c.l., works	lb.	.43 -	—
Philippine copal gum, pale, chips, bgs	lb.	.23¾	.26
nubs, bgs.	lb.	.33¼	.37
seeds, bgs.	lb	.20	Nom
sorts, bgs.	lb.	.20 -	.24
Phloroglucinol, comi., fib dms., works	lb	6.40 -	—
CP, bots., works	lb	17.75 -	—
Tech., fib dms., works	lb.	10.45 -	—
Phloxin red toner (see Eosin red toner)			
Phosgene, ret cyls. works	lb	.15½-	—
Phosphate, defluorinated (see under D)			
Phosphate rock, Curacao, Atlantic ports New Orleans	ton.	48.00	- —
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l. mines	short-ton.	4.796	- —
68-70%, b.p.l., bulk, c.l., same basis	short-ton.	5.148	- —
70-72% b.p.l. bulk, c.l. same basis	short ton.	5.728	- —
74-75%, b.p.l., bulk, c.l., same basis	short ton.	6.628	- —
76-77% b.p.l. c.l. bulk. same basis	short ton.	7.518	- —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.			
Phosphoric acid, tooo grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00	- —
cbys., l.c.l., same basis.	100 lbs.	7.25	- 7.75
tanks, t.w., works	100 lbs.	5.60	- —
80%, cbys., c.l., frt. equald	100 lbs.	7.85	- —
cbys., l.c.l., works	100 lbs.	8.10	- 9.35
tanks, t.w. works	100 lbs	6.00	- —
Phosphoric acid, NF, 85%, cbys, c.l., works	100 lbs.	8.50	- —
cbys., l.c.l., works	100 lbs.	8.75	- 9.00
tanks, t.w., works	100 lbs.	6.65	- —
Phosphorus, amorph., red, dms., t.l., works	lb.	.55	- —
dms. smaller lots, works	lb.	.56	- .57
White (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	- .20½
dms., l.c.l., works, frt. equald	lb.	.21½-	—
tanks, works, frt. equald	lb.	.19	- —
Phosphorus oxychloride, dms., c.l., works	lb.	.14	- —
dms., l.c.l., works	lb.	.15	- —
tanks, works	lb.	.12½-	—
Phosphorus pentasulfide, powd., dms., c.l. works	lb.	.13½-	—
dms. l.c.l., works	lb.	.14½-	.15½
Solid, dms., c.l., works	lb.	.11½-	—
dms. l.c.l., works	lb.	.12½-	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1375-	.1475
dms., l.c.l., works	lb.	.1475-	.1675
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38	- —
dms., l.c.l., works	lb.	.39	- .40
Phosphorus trichloride, dms., c.l., works	lb.	.14	- —
dms., l.c.l., works	lb.	.15	- —
tanks, works	lb.	.12½-	—
Phthalic anhydride, bgs. c.l., works, frt. equald	lb.	.17	- .21
bgs., l.c.l., same basis	lb.	.18	- .22
tanks, same basis	lb.	.16½-	.20½
Phthalimide, 97-98%, dms., frt. alld	lb.	.65	- —
Phthalocyanine blue, full strength, bbls dlvd. E. of Rockies	lb	2.90	- —
Resinated, bbls., same basis	lb	2.75	- —
Water dispersable, bbls., same basis	lb	1.52	- —
Phthalocyanine blue prices 1c. higher W of Rockies.			
Phthalocyanine green toner, bbls., works	lb	3.35	- —
Resinated, bbls	lb	3.00	- —
Water dispersable, bbls	lb	1.71	- —
Phthalocyanine green prices 1c. higher W of Rockies			
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more	lb	5.00	- —
NF fib. dms	lb.	5.20	- —
Picoline, dms., c.l., works, frt. equald	lb.	.43	- .43½
dms. l.c.l. works frt. equald	lb.	.44	- —
tanks, same basis	lb.	.415	- —
b-Picoline, 98%, dms., t.l., works,	lb	1.08	- —
dms., l.c.l., same basis	lb.	1.15	- —
tanks, same basis	lb.	.96	- —
b,g-Picoline, 5°C. dms., c.l., works,	lb.	.32½-	—
dms., l.c.l., works	lb	.33	- —
g-Picoline, dms., f.o.b., works	lb	1.60	- —
tanks, t.l. same basis	lb.	1.50	- —
Picric acid, NF bbls.	lb	.85	- —
Tech. bbls	lb	.44	- —
Pigment green B, kgs	lb.	1.50	- —
Pilocarpine hydrochloride, USP, bots	oz	5.25	- —
Pilocarpine nitrate, USP bots. vials.	oz	5.15	- —
Pimento, Jamaican, bgs.	lb.	.68	- —
Mexican, bgs.	lb.	.57	- —
Pimento berry oil, NF dms.	lb	3.75	9.25
Pimento leaf oil, crude, cns.	lb.	2.20	- 2.60
Pine oil, dest.-dist. dms., l.c.l. works	lb.	.15	- —
dms. l.c.l ex whse New York.	lb.	.173	- —
Steam-dist., dms., ex whse., New York	lb.	.185	- —
dms. dlvd	lb.	.188	- —
Pineneedle oil, Siberian (see Abies Siberica oil)			
Pinetar, retort, dms., c.l., works	lb.	.0611-	—
dms., l.c.l., works	lb.	.0684-	—
dms., c.l., ex whse, New York.	lb.	.0795-	—
tanks, works	lb.	.0511-	—
Pinetar oil comi. dms. c.l. works.	lb.	.0611-	—
dms., l.c.l., works	lb.	.0684-	—
dms., c.l., ex whse., New York.	lb.	.0795-	—
tanks, works	lb.	.0511-	—
NF, rectified, dms., incl., l.c.l., works, South	lb.	.40	- —
dms. t.c.l. ex whse. New York	lb.	.41½-	—
Refd., dms., incl., l.c.l., works	lb.	.35	- —
dms. incl l.c.l., ex whse New York	lb	.36½-	—
Pink root, bls.	lb.	1.75	- —
Piperazine, anhyd., dms., c.l., , frt. alld	lb.	1.80	- —
dms, l.c.l., same basis	lb.	1.85	- —
Piperazine citrate 36% dms., 1,000 lbs. or more frt alld	lb.	1.18	- —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld	lb.	1.23	- —
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.86	- —
dms., 200-900 lbs., frt. alld	lb.	.89	- —
Piperazine phosphate 42% dms., 1,000 lbs. or more frt. alld.	lb.	1.06	- —
Piperidine, dist. 98% min. dms., frt. equald	lb	2.60	- —
Piperonyl butoxide dms. dlvd E	lb	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)			
Platinum metal, works	oz.	81.00	-85.00
Pimento root, bls	lb	45	.50
Podophyllum resin, NF, dms.	lb.	12.50	- —
Poke root bls	lb	19	- .22
Polymyxin, bots., bulk, 50 billion units or more	1,000,000 units.	.52	- —
bulk, bots., 25-50 billion units.	1,000,000 units.	.54	- —
bulk, bots. 1-25 billion units.	1,000,000 units.	.56	- —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.42	- —
dms., 10,000-20,000 lb lots, works.	lb.	.44	- —
dms. smaller lots works	lb.	.47	- .49
Polyoxyethylene sorbitan tristearate, dms., 20,000 lb lots, works.	lb.	.42	- —
dms., 10,000-20,000-lb. lots, works	lb.	.44	- —
dms. smaller lots works	lb.	.47	- .49
Pontianak copal gum, chips, bgs.	lb.	.25	- —
Nubs bgs	lb.	.17	- .19
Poppy seed Argentine, bgs.	lb	No stocks	
Dutch, bgs.	lb.	.22	- —
Danish, bgs.	lb.	.20½-	—
Polish, bgs	lb.	.20	- —
Turkish, ngs.	lb.	.17½-	—
Potash caustic, liq., 45% basis, dms., c.l., works 100 lbs.		4.25	- —
dms., l.c.l., same basis 100 lbs		5.05	- —
tanks, same basis 100 lbs		3.76	- —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	- —
reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs.		10.20	- —
solid, 88-92%, dms., c.l., works, 100 lbs.		8.70	- —
dms. l.c.l. works 100 lbs		9.75	- —
Potassium acetate, NF 200-lb. dm., f.o.b works E	lb.	.31	- —
Potassium bicarbonate, USP gran. dms	lb.	.22	- —
USP, powd., dms	lb.	.24	- —
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18	- —
bgs., l.c.l., works	lb.	.18¼-	.19¼
Potassium bichromate in dms. ¾c. higher.			
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald	lb.	.37	- —
100-lb. bgs., 5,000 lbs. 1 shipt., same basis	lb.	.38	- —
100-lb. bgs., smaller lots, same basis	lb.	.40	- —
Potassium borohydride, powd., dms., works	lb.	16.00	-22.00
Pelletized postassium borohydride $1.25 per lb higher in 1,000-lb lots.			
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	- —
dms., smaller lots, works	lb.	.52	- .53
Potassium bromide, USP, gran. bbls., kgs	lb.	.39	- .40
Potassium carbonate, dom., NF, gran., bbls. dms	lb.	.20	- —
Dom., tech. powd., bbls., dms	lb.	.21	- .23
Dom., calcinated, bgs., c.l., works, 100 lbs.		8.50	- —
bgs., l.c.l., same basis 100 lbs.		9.55	- —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs.		7.10	- —
bgs. l.c.l. works 100 lbs		8.15	- —
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼-	—
dms., l.c.l., works	lb.	.13½-	.14¼
Powd., dms., c.l., works	lb.	.12¾-	—
dms., l.c.l., works	lb.	.14 -	.15
works	lb	.12¼-	—
NF, cryst., dms., 2,000 lbs. or more, works	lb.	.16¾-	—
NF, gran. 25-lb metal dms	lb.	.36	- —
NF, powd., dms., 2,000 lbs or more works	lb.	.17¼-	—
Potassium chloride indust., 99.9% KCL, bulk, c.l works	ton	29.00	- —
bgs., c.l., works	ton	33.50	- —
99.3% KCL bulk, c.l., works	ton	27.00	- —
bgs. c.l. works	ton	31.50	- —
USP, cryst., dms.	lb.	.20	- .22
USP, gran., dms.	lb.	.21	- .23
USP, powd., dms.	lb.	.24	- .26
Potassium chloride, agricultural (see Potassium muriate)			
Potassium chromate tech., dms., works	lb.	.80	- .81
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E	lb.	.43	- —
powd., 250-lb. dms. same basis.	lb.	.46	- —

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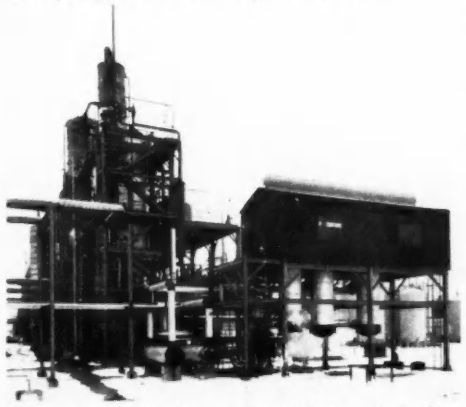
U.S.I. CHEMICAL NEWS

April ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1960

New Ether Hydration Unit Ups U.S.I.'s Potential Ethyl Alcohol Capacity

A new ether hydration unit has just been completed at U.S.I.'s ethyl alcohol plant, Tuscola, Ill. With the new unit it is now possible for the company to take part of its ethyl ether production, formed as a by-product of the ethyl alcohol production process, and convert it to ethyl alcohol. The new unit gives the company an additional potential capacity of up to 6,000,000 gallons of ethyl alcohol annually, figured on a 190 proof basis.



New ether hydration unit at U.S.I.'s ethyl alcohol plant, Tuscola, Illinois.

U.S.I. refines a portion of the by-product ether to U.S.P., A.C.S., Refined and Technical grades for industrial, institutional and laboratory use. Part of the remaining material can now be converted into a low-proof ethyl alcohol through a catalytic process developed by U.S.I. The low-proof alcohol is then introduced into the regular process stream at U.S.I.'s alcohol plant for conversion to 190 proof or anhydrous product.

The new ether hydration unit enables U.S.I. to have a flexible means of keeping alcohol and ether production in balance. The company can serve the needs of these markets without being restricted by facilities.

Sodium Treatment Found to Increase Carbon Activity

A recent study reveals that sodium treatment of activated carbon, which is known to increase the material's ability to adsorb inert gases, also improves its liquid adsorption characteristics.

For the binary mixture n-heptane with toluene for example, toluene adsorption is increased from 48% to 58%. For n-heptane with propyl sulfide, adsorption of the latter material climbs from 25% to 85%.

The activated carbon is treated by stirring it with molten sodium until a homogeneous mixture is formed. Selectivity of the carbon is not altered.

The research group believes that sodium treatment causes small gaps to form between the carbon sheets which are generally thought to make up the structure of activated carbon. These gaps, probably made by sodium atoms wedging between the carbon sheets, give the carbon structure a honeycomb appearance. A much larger surface is thereby produced for liquid or gas adsorption.

U.S.I. Pulp and Paper Lab Expands to Cover More Bleaching Problems

Technical Service Work Now Emphasizes Use of Chlorine and Caustic Soda in Multi-Stage Bleaching of Kraft. Studies on Sodium Peroxide Bleaching Continue.

U.S.I.'s pulp and paper laboratory at Ashtabula, Ohio, established over eight years ago to provide technical service assistance on pulp bleaching with U.S.I.'s sodium peroxide, has been expanded, with the staff now working on problems relating to the use of U.S.I. chlorine and caustic soda in the multi-stage bleaching of wood pulp.

These technical service facilities are typical of the best industry laboratories maintained by pulp and paper companies themselves. Therefore, U.S.I. is able and willing to handle requests for comprehensive evaluations and recommendations on bleaching systems, techniques and chemicals—usually aimed at achieving the brightest pulp with the minimum degradation in fiber strength.

How Pulp & Paper Lab Functions

In a typical call, W. F. Schroeder, who has a very extensive background and acquaintance with the paper trade, visits a mill, examines the bleaching operation and takes pulp samples back to the laboratory.

MORE

Chlorination of kraft pulp on a laboratory scale in fume hood at U.S.I.'s pulp and paper lab, Ashtabula, Ohio. W. H. Schroeder has obtained a sample of filtrate for residual chlorine analysis. J. R. Leidich is checking weight of chlorine added to pulp.

Polyurethane Foam Radome, First Ever Built, Now Under Test in Canada

In a program designed to provide ground shelters with greater dielectric "transparency" —to minimize energy loss and boresight error in radar tracking installations—the world's first polyurethane foam radome has been built and is under test by Canada's National Research Council.

The polyurethane dome is undergoing an extensive series of electronic tests using actual field radar equipment. From these electrical analyses, NRC expects to obtain data indicating the suitability of such foam for radar at the frequencies involved. Favorable results could lead to extensive use of such foam, particularly for missile tracking in anti-missile type radar systems.

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April ★ # U.S.I. CHEMICAL NEWS ★ 1960

CONTINUED

Paper Laboratory

There the samples are bleached under a variety of conditions in a trial program based on knowledge of individual requirements and experience with many types of pulps. The bleached pulp samples are then made into hand sheets and tested for brightness and other necessary characteristics in a constant temperature, constant humidity testing room. Heat-aging studies can also be conducted. After all variables have been examined, a process is recommended for obtaining a bleached pulp that combines maximum brightness with maximum strength.

In the multi-stage bleaching of kraft—which usually involves treatment with chlorine, followed by caustic extraction and several whitening stages using bleaching agents such as hypochlorite, peroxide or chlorine dioxide—conditions of time, temperature, pH and pulp and chemical concentrations must be carefully worked out. U.S.I. technical service engineers are qualified to evaluate all the variables, including the type of equipment used.

U.S.I. interest in pulp bleaching arises from its sodium peroxide plant at Ashtabula, Ohio, and its two chlorine and caustic soda plants at Huntsville, Alabama. Further information on the pulp and paper technical service laboratory may be obtained by writing to U.S.I., 99 Park Avenue, New York 16, N. Y.

W. H. Schroeder determines brightness of a pulp handsheet on Hunter Multipurpose Reflectometer at U.S.I.'s pulp and paper laboratory.

Polyethylene Is Used For Radiation Shields

Polyethylene radiation shields, so thick they must be cut by specially designed saws, are being produced for use on atomic powered vessels. These polyethylene panels are intended to provide excellent protection from neutron bombardment and are lower in weight than conventional materials such as concrete and lead. The hydrogen nuclei in the polyethylene serve successfully to reduce the energy in the high energy neutrons created by atomic fission. A small quantity (1 or 2%) of boron, compounded with the polyethylene, absorbs the remaining low energy neutrons.

The polyethylene panels must meet rigid specifications and require critical quality control. They are made by a specially adapted extrusion technique which allows production of heavy gauge sheets. The shields can be made in standard widths over 36 inches and may be cut to any length according to specifications.

PETROTHENE® 100, a polyethylene resin supplied by U.S.I., is used to make the panels because of its ideal processing characteristics and because it passes all military specifications for radiation shielding.

Solox® Solvent Covered In New U.S.I. Data Sheet

Complete technical data on U.S.I.'s ethyl alcohol proprietary solvent SOLOX are given in a new, six-page data sheet. SOLOX frequently can be used in place of specially denatured alcohols because of its general utility and excellent solvent qualities. The permit and bond required for S. D. alcohols are not needed for SOLOX. It is noncorrosive, burns with a clean, colorless flame, leaves no residue and has a mild, nonresidual odor.

The new data sheet includes specifications, properties, compositions of the five SOLOX proprietory solvent formulations, and shipping information. Applications in lacquers, shellacs and varnishes, in the textile field, in chemical manufacturing, in cleaning compounds, as a fuel oil conditioner, in photography and as a fuel are described.

Government regulations pertaining to SOLOX complete the data sheet. Copies may be obtained from U.S.I. sales offices or from the New York office at 99 Park Avenue.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Protective coating systems for concrete floors compared in new coating chart. Gives resistance of each system to chemicals, thermal shock, abrasion, temperature. Shows compressive strength, impact resistance, skid properties. **No. 1580**

Silicone products for antifoams, release agents, lubricants, cosmetics, polishes, water repellents, paints, textile finishes and electrical insulation described in new bulletin. Silicone rubber compounds also covered. **No.1581**

New hydrogen analyzer uses hot extraction principle to determine content of the gas in metals. Said to be compact, inexpensive, and to combine speed and accuracy with ease of operation. Used for checks, controls, studies. **No. 1582**

Blowing urethane foams with fluorinated hydrocarbons discussed in new brochure. Includes advantages of making foams this way; uses of urethane foams; physical properties of blowing agent, many foamed plastics, other insulation. **No. 1583**

Latest developments in cast polyethylene film described in new booklet which deals with film casting equipment such as chill rolls and dies, and gives a comparison of properties among cast, quenched and blown films. **No. 1584**

New miniaturized infrared gas analyzer is said to be smaller than portable TV set, to weigh only 30 pounds, to accurately measure and control furnace atmospheres, dew point, combustion, toxic and combustible gases, chemicals. **No 1585**

Two new thread sealants for storable rocket propellant systems are now available, one for nitrogen tetroxide (N_2O_4) and the other for unsymmetrical dimethyl hydrazine (UDMH). Neither is impact-sensitive in these propellants. **No. 1586**

Ozone chemistry and technology covered in collection of 60 papers presented at International Ozone Conference, now being sold. Ozone now tool for organic, analytical and photo chemists, meteorologists, plant physiologists. **No. 1587**

New gas chromotography analyzer, incorporating advanced developments such as Golay columns and ionization detectors, has been introduced. Detectors permit accurate measurement of sample components in the minute quantities resolved by the Golay column. **No. 1588**

Radioactive carbon-14 compound adenosine-8-C14 now available is a radioactive purine valuable in chemistry, biology, pharmacology. Useful in study of carbohydrate metabolism since it is a constituent of plant and animal nuclei. **No. 1589**

PRODUCTS OF U.S.I.

HEAVY CHEMICALS

Caustic Soda, Chlorine
Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Phosphoric Acid, Fertilizer Grade
Ammonia, Anhydrous: commercial & refrigeration. Tank cars or tank wagons.
Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions
Sulfuric Acid: all strengths, 60 Baume to 40% Oleum. Also Electrolytic grade to Federal specifications. Tank cars or tank wagons.
Sodium Peroxide

OTHER PRODUCTS

PETROTHENE® Polyethylene Resins

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Intermediates.
Ethyl Alcohol: Pure and all denatured formulas; Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL PR.
Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, Diethyl Carbonate, DIATOL®, Diethyl Oxalate, Ethyl Ether, Acetone, Acetoacetanilide, Acetoacet-Ortho-Chloranilide. Acetoacet-Ortho-Toluidide, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate, Urethan U.S.P. (Ethyl Carbamate), Riboflavin U.S.P.
Animal Feed Products: DL-Methionine, MOREA® Premix (to authorized mixer-distributors).

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

U.S.I. SALES OFFICES
Atlanta • Baltimore • Boston • Chicago • Cincinnati • Cleveland
Detroit • Kansas City, Mo. • Los Angeles • Louisville • Minneapolis
New Orleans • New York • Philadelphia • St. Louis • San Francisco

Potassium cyanide, dms. 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999 lb. lots, works lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. 65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —
Potassium fluoborate fib dms., c.l., works lb .30 - —
fib. dms., l.c.l., works lb .31 - —
Potassium fluoride, dms. works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech (see Potash caustic)
Potassium hydroxide, USP, pellets, 100-lb dms 1 to 100-dm. lots lb .33½ .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide USP, cryst., gran., or powd., 250-lb dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K2O, bulk, c.l., works unit-ton .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .34½- .36½
bagged, 60% minimum K2O, same basis ton.25.60 -26.80
Gran., bulk, c.l., works unit-ton. .35 - .37
bagged, 60% minimum K2O, same basis ton.25.90 -27.10

Inside prices apply to material contracted for prior to July 1, 1959.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 - —
bbls. smaller lots 100 lbs.16.00 -19.00
NF, gran., bgs. 20-ton lots 100 lbs. 9.50 —
bgs. smaller lots 100 lbs.11.00 -12.00
NF, powd., bgs., 20-ton lots.100 lbs.10.50 - —
bgs. smaller lots 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd. 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms. ton lots, ex whse ton.311.00 - —
dms., smaller lots ex whse ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 .20
Potassium permanganate, comi., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferro-cyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., t.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.63
tanks, works 100 lbs. 6.15 - —
40.3° Be, 1:2.1, dms., c.l., works. 100 lbs. 5.93 - —
dms., t.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks, works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works. 100 lbs.17.30 -18.00
bgs., t.c.l., works 100 lbs.17.80 —
Soln., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms. t.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld., E lb. .776 - .848
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .67½- .69½

Inside price applies to tonnage contracted for prior to July 1, 1959.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

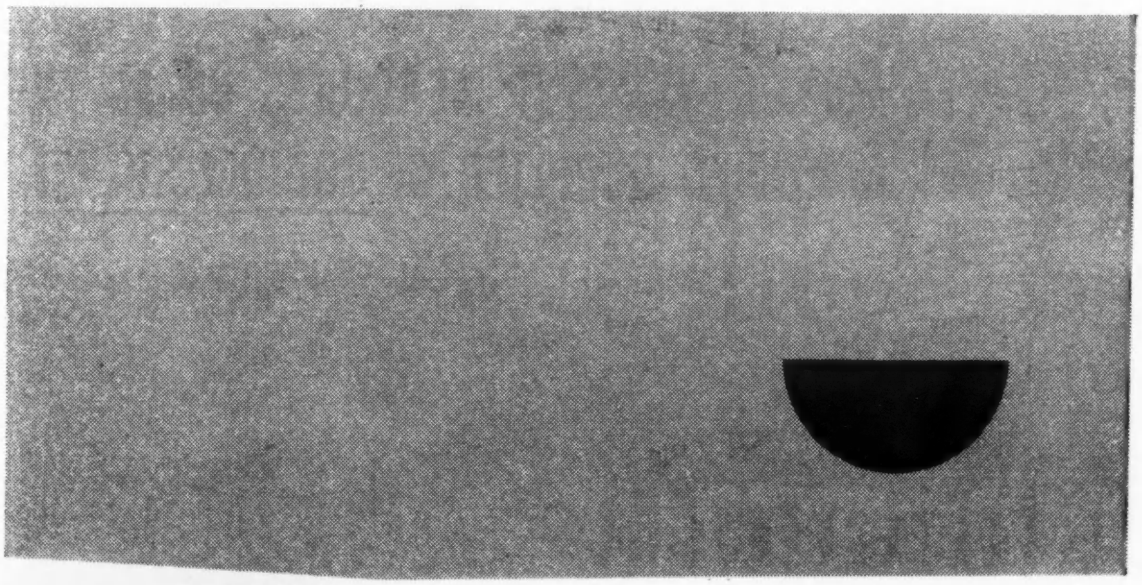
Potassium sulfate, NF VII, cryst., dms. lb. .31 - .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K2SO and 18% MgO, bulk, works, base price ton 13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib, dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb. .50 - —
fib. dms., t.c.l., works lb. .52½ 55
Pregnenolone, bots. gram. No prices
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld. lb. 2.60 - —
dms., 100-500 lb. lots lb. 2.95 3.15
Progesterone, USP, bots. gram. No prices.
Progesterone acetate, bots. gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works lb. .89 - —
dms., l.c.l., l.t.l., same basis lb. .90 - —
tanks, same basis lb. .87 - —
Propionic acid, syn. pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., divd. lb. .14¾- —
dms., t.c.l., divd. lb. .16¼- —
tanks, divd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., divd. lb. .14 - .15
dms., l.c.l., divd. lb. .15½- .16½
tanks, divd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo 55.10 -55.30
n-Propylamine, dms., c.l., divd. lb. 1.24 - —
dms., t.c.l., same basis lb. 1.255 - —
n-Propylene dichloride, consumers', dms., c.l., divd. E lb. .0845- —
dms., t.c.l., same basis lb. .0995- —
tanks, same basis lb. 07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., divd. E lb. .15 - —
dms., t.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12½- —
USP, dms., c.l., divd. E lb. .17 - —
dms., t.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., divd lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., divd E. lb. .17 - —
dms., t.c.l., divd. E. lb. .18½- —
tanks, divd. E. lb. .14½- —
Psyllium seed, black, bgs. lb. .30 - .35
Blonde bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs., smaller lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .03⅛- —
fine, bgs ton lots lb 04 —
sun dried, coarse, bgs ton 60.00 —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. lb .23 - .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs. ton, works lb. .59 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works. gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb.11.00 -11.35
purif., 20%, dms., works lb.11.00 -11.35
Pyridine, denat., dms c.l., works and frt equald gal 2.77 - —
dms t.c.l. same basis gal 2.80 - —
Refd., 2°, non ret., dms., l.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride USP, 560-gram bots., dms. f.o.b. works. kilo.175.00 - —
Pyrites, Canadian 48-50% S, mines, long-ton 5.00 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b. works lb. 3.50 - —
Pyrogallol, NF 100 lb dms. lb 3.50 - —
Pyroxylin, USP bots. lb 9.50 - —

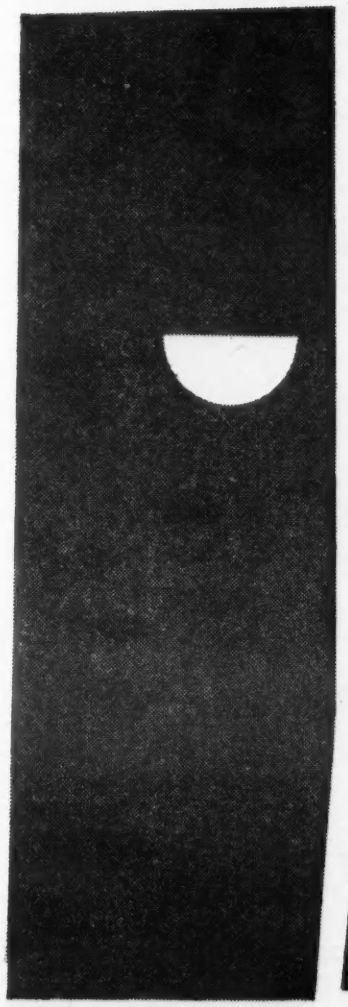
Q

Quassia chips lb .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs. lb. 1.30 - 1.40
Quinidine sulfate, USP, 1,000-oz. dm., oz. .74½- —
Quinine, NF, 1,000-oz. dm. oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .2575- —
Quinoline, dms c.l., frt equald lb 50¾ —
dms., t.c.l., same basis lb 51¼ —
tanks, same basis lb .50 - —

R

R salt, paste, dms frt alld., 100% basis lb. .98 - —
Powd., frt alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms. lb. .15 - .15¼
tanks lb. .13 - —
Rare earth chloride, 46%, dms., dlvd lb. .25 - —
Rare earth oxalate, NF, 43-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls. dms lb 1.00 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)





Looking toward tomorrow, visualizing the shapes and courses it will take, anticipating its needs...this search for ways to serve industry better and more fully has been an unremitting spur to Sonneborn, since many tomorrows ago. Inasmuch as this quest dates back to the turn of the century and has been concentrated upon a specialized segment of petroleum refining, it is not surprising that in products, technical assistance, service, Sonneborn Goes Further.

SONNEBORN
CHEMICAL AND REFINING
CORPORATION

White Oil Division, 300 Park Ave. South, New York 10, N.Y.

SPECIALISTS IN PETROLEUM SULFONATES (PETRONATES)
WHITE MINERAL OILS • PETROLATUMS

W9-18

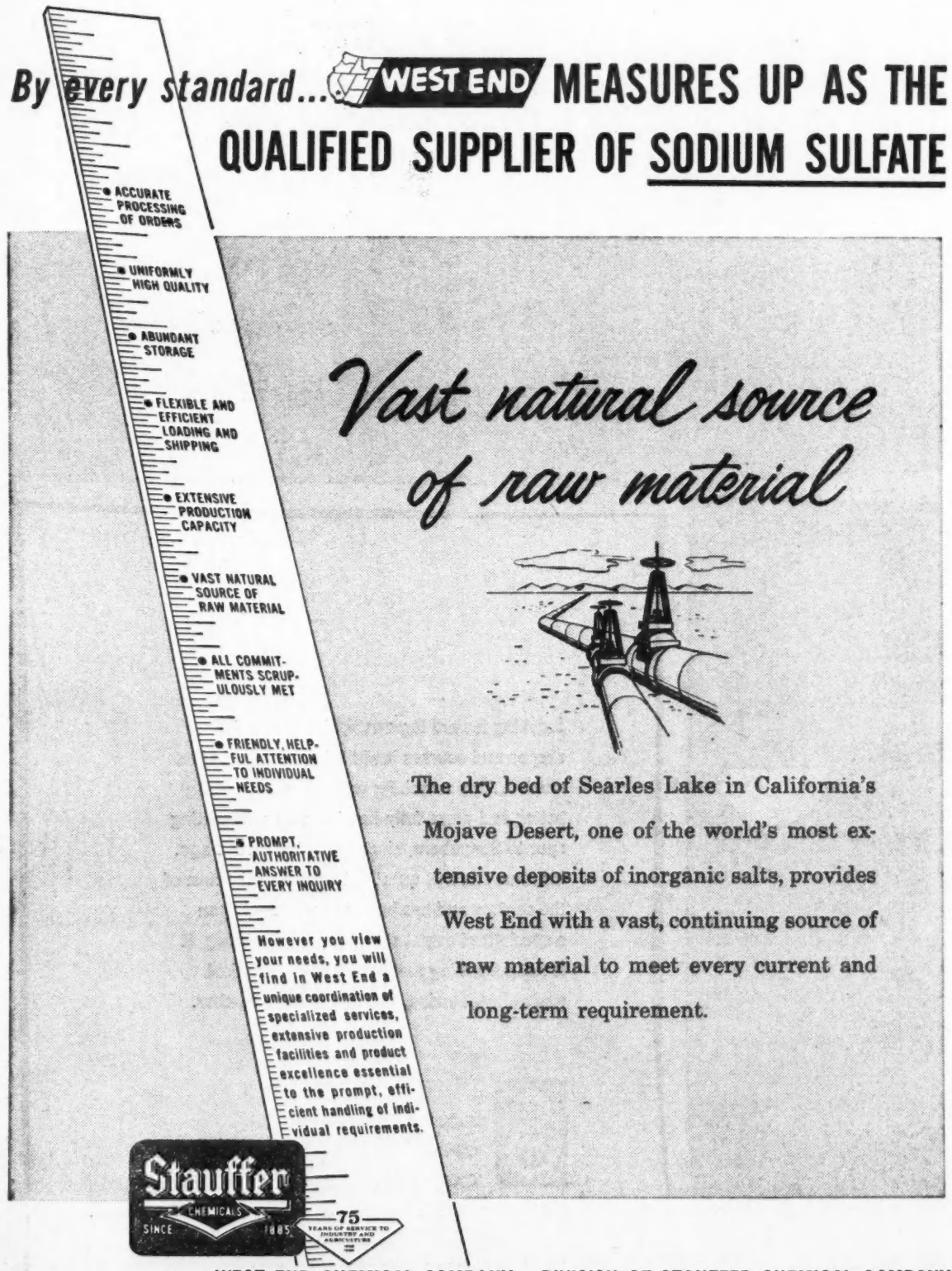
We have changed our name from L. SONNEBORN SONS, INC. to SONNEBORN CHEMICAL AND REFINING CORPORATION

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide, red)
Reserpine, cryst. bots gram 1.25 - —
Resorcinol tech grade, dms., c.l., works, frt equald lb 77½ - —
dms., l.c.l. same basis lb 78½ - —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF dms lb 2.50 —
Rhatany root bgs lb .14 .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 5.00 - —
Tungstated, PTMA works, kgs lb 6.60 —
Rhodinol, 5-lb. cans Synthetic lb.42.00 -51.00
lb.14.00 -16.00
Rhubarb root, india whole bgs lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo.130.00 - —
Riboflavin, 5-phosphate-sodium fib dms., kilo or more dlvd. kilo 104.50 —
Rice bran oil, clarified, dms. t.c.l. lb. .14½ - .15
tanks, dlvd, E lb. .12½ - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat, Bulgarian bots oz 72.00 —
Turkish, bots. oz 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 - 1.40
Spanish, tech., cns., dms. lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone fib dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit lb. 12 - —
Rottenstone bgs. 5-ton lots, ex-whse lb 03¾ - —
bgs. ton lots same basis lb 04¼ - —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875 - —
Houston, Texas gal. .155 - —
Rue oil, bots lb 2.75 3.00
Rutin, NF 6b dms., 10 kilo lots kilo.13.00 - —
fib. dms., 5 kilo lots kilo.13.50 - —
fib. dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd. bgs., c.l., works lb. .22 - —
bgs., t.c.l., same basis lb .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1755 - .18
tanks, Atl. Coast lb. .1555 - —
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns lb .18 - —
Sage oil, clary, bots lb.20.00 -30.00
Dalmatian, cns. lb. 2.85 - 3.25
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal)
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb 1.23 - —
dms., t.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb. dms lb 1.05 - —
Salicylic acid, crude, fib dms., c.l., t.l., frt alld lb. .37¼ - —
fib dms. t.c.l., frt. alld. on 100 lbs or more lb. .38½ - —
Sublimed, tech. fib dms., c.l., t.l. dlvd lb. 39¼ - —
6b dms., t.c.l. dlvd lb. 43½ - —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. 50½ - —
200-lb fib dms., less than 1,000 lbs lb. 53¼ - —
100-lb. fib. dms., 1,000-lbs. or more lb. .52½ - —
100-lb 6b dms., less than 1,000 lbs. lb. .55½ - —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½ - —
100-lb 6b dms., less than 1,000 lbs lb. .60½ - —
Salol, NF, gran., bbls. kgs. lb 1.20 - —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l., 100 lbs. ton 1.00 - —
Salt, table vacuum, common, fine, paper bgs. c.l. 100 lbs. ton 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs. lb .65 .85
powd., fib. dms. lb .75 .76
Sandalwood oil, cns. lb.17.50 -18.75
Sarcosine, tech. tanks, f.o.b., works, frt. equald lb. 1.03 —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. lb. .43 - —
Nat., dom., dms lb 1.45 - 2.15
Savory oil, cns lb 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd. bgs. frt. alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP bots oz.13.00 —
Sebacic acid, CP, bgs. c.l., works lb 69½ —
bgs., t.c.l., works lb 71½ —
Purified, bgs., c.l., works lb 65½ —
bgs., t.c.l., works lb 67½ —
Seidlitz mixture fib dms. 5,000-lb lots lb 30½ —
fib. dms., smaller lots lb 31 .32
Selenium powd. 99½% dms. dlvd lb 7.00 —
Senega root, bls lb. 3.00 - —
Senna leaves Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls. lb .18 - —
No 3, bls. lb .14 - —
pods, bls. lb .28 - —
powd. bbls., bxs. lb .17 - —
Serpentaria root, bls. lb 6.50 —
Sesame oil USP dms lb .33 .39
Sesame seed, Colombian, bgs. lb. .15½ - —
Lebanese, hulled, bgs lb .19 - —
Nicaraguan, hulled, bgs lb. .21½ - —
nat., bgs. lb .14 - —
Salvadorian, nat., bgs lb .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb lots lb. .46 - —
bbls. 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb lots lb .48 - —
Bonedry shellac prices for less than 1,500-lb. lots 1c per lb higher for all packages.
Shellac, bleached, refd. bgs., 1,500-lb lots lb. .55 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb lots lb .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 .37
superfine, bgs., 10-bg. lots lb .32 .34
Shellac in 1 to 10-bg. lots 1c. per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½ - .18½
paper bgs., t.c.l., works lb. .06¾ - .17¾
Raw, paper bgs., c.l. works lb. .06¾ - .16¾
paper bgs., t.c.l. works lb. .07 - .17
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
bgs. t.c.l., works, ex whse ton 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs. t.c.l., works ton 25.00 - —
99½%, 140 mesh bgs., c.l. works ton 15.00 - —
bgs. t.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l. works lb. .18 - —
dms., t.c.l., works lb. .22 - .30½
tanks works lb .17 —
Silver bullion, ingots, cs Troy oz. .91%- —
Silver cyanide bots. 1,000-oz lots, oz. .94¾ - —
bots., 500-oz. lots oz. .95¼ - —
bots., 100-oz. lots oz. .96¼ - —
Silver nitrate CP, cryst., bots., 1,000 to 3,000-oz., f.o.b. works, oz. .67¼ - —
bots., 250-500 oz., same basis, oz. .67¾ - —
USP granular silver nitrate 4c. per oz. higher
Silver proteinate, mild, USP, bots., dms., 1,000-oz lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz 1.10 —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls lb. .30 .35
Powd., bls. lb. .35 - .40
Whole, bls lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., t.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l. works 100 lbs. 1.85 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq. 50% sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks works, dry basis 100 lbs. 2.90 - 3.00
73% sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs 4.80 - —
Soda sal, conc., bgs. c.l., works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½ - —
NF, 60% gran., dms. c.l., works, lb. .15½ - —
dms., t.c.l., works lb. .17½ - —
Sodium alginate, NF, white powd., dom., 300 lbs or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted lb. 1.80 - —
Sodium antimoniate, bgs., c.l. dlvd. E lb. .27½ - —
bgs., l.c.l., dlvd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, dms., any quantity, f.o.b. works lb. .40 - —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .27½ - —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis kilo.10.35 - —
5-kilo dm., same basis kilo.10.75 - —
1-kilo bot., same basis kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb .35 - —
dms., t.c.l., same basis lb .39 - —
USP, dms., c.l., t.l. frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis, lb. .45 - —


By every standard... WEST END MEASURES UP AS THE QUALIFIED SUPPLIER OF SODIUM SULFATE
ACCURATE PROCESSING OF ORDERS
UNIFORMLY HIGH QUALITY
ABUNDANT STORAGE
FLEXIBLE AND EFFICIENT LOADING AND SHIPPING
EXTENSIVE PRODUCTION CAPACITY
VAST NATURAL SOURCE OF RAW MATERIAL
ALL COMMITMENTS SCRUPULOUSLY MET
FRIENDLY, HELPFUL ATTENTION TO INDIVIDUAL NEEDS
PROMPT, AUTHORITATIVE ANSWER TO EVERY INQUIRY
However you view your needs, you will find in West End a unique coordination of specialized services, extensive production facilities and product excellence essential to the prompt, efficient handling of individual requirements.
Vast natural source of raw material
The dry bed of Searles Lake in California's Mojave Desert, one of the world's most extensive deposits of inorganic salts, provides West End with a vast, continuing source of raw material to meet every current and long-term requirement.
Stauffer CHEMICALS SINCE 1885
75 YEARS OF SERVICE TO INDUSTRY AND AGRICULTURE
WEST END CHEMICAL COMPANY • DIVISION OF STAUFFER CHEMICAL COMPANY
1956 WEBSTER STREET, OAKLAND 12, CALIF. • PLANT: WESTEND, CALIF.

Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.93 - —
bgs., l.c.l., works ....100 lbs. 3.85 - —
USP, powd., bgs., c.l., works 100 lbs 2.53 - —
bgs., l.c.l., works ....100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works ..... lb. .13¼- .14¼
Sodium bichromate in dms. ¾c. per lb. higher
Sodium bifluoride, bbls, c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis..... lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs 2.00 - —
dms., c.l., frt. equald 100 lbs 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs 1.70 - —
bbls., l.c.l., works .. 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb.19.90 - —
dms., l.c.l., works..... lb.33.00- 40.00
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l., works 100 lbs 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb .09½- .10½
Sodium chlorate in 100-lb dms. only, ¼c. per lb higher.
Sodium chloride, tech. (see Salt)
Sodium chloride, USP, gran., bgs. lb .05 - —
Sodium chlorite, tech., dms., c.l., works lb .58 - —
dms., 20-dm lots or more works, lb. .66 - —
dms, smaller lots, works lb .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb .27 - —
dms., l.c.l. works lb .28 - —
Sodium chromate, anhyd, fib. dms., c.l., t.l., works lb .14¾- —
fib dms. l.c.l., works lb. .15¼ .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs. l.c.l. lb. .1065 .1190
Sodium citrate, anhyd. 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran. bgs. c.l., same basis lb .28 - —
USP XIV gran. bgs. c.l., same basis lb. .29 - —
Sodium citrate, USP powd prices ½c higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb .85 —
dms. smaller lots, works lb. .90 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb .193 - —
dms. over 1,000-lb lots lb .203 - —
dms., 100-lb to 1,000-lb lots lb. .213 - —
Gran sodium cyanide 1c higher
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms. l.c.l. works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works ... lb. .15 - —
250-lb dms. l.c.l. works lb. .15¼ —
Sodium dimethyl dithiocarbamate, 40% soln. dms c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½ —
bgs. smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt equald lb. .1465- —
Sodium formate, bgs., c.l. works, 100 lbs 7.05 - —
bgs l.c.l. ex whse 100 lbs 8.65 - —
Sodium gentisate, 150-lb fib dms lb 5.50 - —
Sodium gluconate, refd., 250-lb dm., f.o.b. works E lb. .84 - —
Tech. bgs., c.l. t.l. same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms. works lb. 1.25 - 2.50
25% soln in oil, dms. 50 lbs or less, f.o.b shipping point lb 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs. same basis lb. 1.20 - —
dms., 1,000 lbs. or more same basis lb. .93 - —
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite dms. c.l., frt. alld lb. .23½- —
dms. l.c.l., frt. alld. ..... lb. .25¾- —
Sodium hydroxide, NF pellets 100-lb dms. 1 to 130 dm lots. lb. .23½- .28
Sodium hydroxide tech (see Soda, caustic)
Sodium hypophosphite, NF, dms., 1,000-lb lots lb .97 —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.c.l., dlvd ..... lb. .21½- —
tanks, c.l. ..... lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 6.50
l.c.l., bgs works 100 lbs 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse, 100 lbs 9.25 -11.25
Tetrahydrate, bgs., c.l., works, ton.210.00 - —
bgs., ton lots, ex whse 100 lbs.13.93 - —
bgs., smaller lots, ex whse, 100 lbs.15.18 -17.18
Sodium metallic bricks, c.l. works, lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metaliuate, bbls, frt alld, lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 - —
dms., c.l., same basis .. 100 lbs.11.70 - —
dms., l.c.l., same basis 100 lbs.12.45 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs. 6,000-19,900 lb lots works 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l. works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs 4.45 - —
bgs. l.c.l., works 100 lbs 4.80 - 6.75
dms., c.l., works 100 lbs 4.95 - —
dms., l.c.l., works.....100 lbs 5.30 - 7.25

Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls.....lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton.43.00 - —
bulk, c.l., works .....ton.44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 - —
bulk, c.l., same basis....ton.44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs.11.00 - —
Sodium ortnosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms. l.c.l., works ..... 100 lbs. 7.05 - 7.65
Hydrated, flake bbls., c.l., works, 100 lbs. 5.65 - —
bbls, l.c.l., works .... 100 lbs. 7.60 - 7.90
Sodium oxalate, 68%, bgs., works, 100 lbs 12.25 - —
99%, bgs., works..100 lbs.15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms. c.l. works, frt. equald lb. .26 - —
dms., l.c.l., same basis .... lb. .27½- .34
Pellets, dms., c.l., same basis..lb. .26 - —
dms. c.l., same basis .... lb. .27½- .34
Powd., dms., c.l. same basis . lb. .25 - —
dms., l.c.l., same basis ..... lb. .26½- .33
Sodium pentoharbital, USP, dms., 100 lbs. or more lb. 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works ..... lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd, E. of Miss lb. .21½- —
dms., l.c.l., same basis..... lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb dms lb 3.75 - —
Sodium phenosulfonate, USP IX, gran., dms lb. .52 - .53
NF, powd., dms..... lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, cryst., bgs., c.l., t.l., frt. equald..100 lbs. 4.60 - —
bgs. l.c.l. frt equald 100 lbs 5.00 - 5.75
Dibasic, duohydrate, bgs., c.l., frt. equald..100 lbs. 7.60 - —
bgs. l.c.l. same basis 100 lbs 8.10 - —
USP, dried, powd., bgs., dms., works lb .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald..100 lbs. 9.00 —
bgs., l.c.l., same basis 100 lbs 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald..100 lbs. 9.00 - —
bgs., l.c.l. frt. equald 100 lbs 9.45 -10.05
Sodium phosphate tn dms. 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate acid, bgs., c.l., works, frt equald, 100 lbs 11.10 —
bgs., l.c.l., same basis 100 lbs 11.85 -12.35
Sodium pyrophosphate, terric, dms., c.l., t.l., works lb .36 —
dms. l.c.l. works lb .37 .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald, 100 lbs. 7.81 - —
bgs., l.c.l. same basis 100 lbs 9.21 9.71
Sodium salicylate USP dms. 1,000-lbs or more lb 78½ —
dms. less than 1,000 lbs dms lb 81½ —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 —
bgs., l.c.l. dlvd zone 1 .. 100 lbs 4.10 4.35
dlvd zone 2 ..... 100 lbs 4.35 4.60
dlvd zone 3 ..... 100 lbs 4.75 4.90
dlvd zone 4 ..... 100 lbs 5.35 5.60
Sales zones are: (1) All states E. of Miss., R and N of south bound of Ky and Va, Ala., La., and Miss. south of 31°; Tex E of 100°; S of 31° Fla.; also Me., N H and Vt. in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark E of 98° Ga.; Iowa (except Davenport) Minn Mo (except St Louis) Neb E of 98° N C., S C., Tenn and Tex N of 31° and E of 100° (except Wichita Falls); also Ala, La. and Miss. No of 31°; (3) Ark W of 98°, Kan., Neb W, of 98° N D., Okla., S D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs 5.70 - —
dms., c.l., t.l., works... 100 lbs 6.20 - —

for floor waxes that really stand up...

WATEREZ & SYNTHEMUL

1582 WATEREZ alkali soluble resin

■ In floor wax, the use of Reichhold's 1582 WATEREZ, an alkali soluble resin, allows a much broader range of floor finish raw materials than previously possible. A formula with up to 25-30% of 1582 WATEREZ insures outstanding gloss and levelling without embrittlement or powdering. Another advantage of this resin is its rapid solubility at temperatures as low as 85-100° F., with excellent stability of the resulting cuts.

9431 SYNTHEMUL acrylic emulsion

■ With this Reichhold acrylic emulsion (previously designated ACRIPOL), floor finishes can be formulated that have excellent gloss, color, toughness and spreadability. The compatibility characteristics of 9431 SYNTHEMUL are unsurpassed. Combination with a broad range of resins and waxes is possible. For data on formulating floor wax with WATEREZ and SYNTHEMUL, write to Reichhold's Emulsion Division.

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Synthetic Resins • Chemical Colors • Industrial Adhesives • Phenol
Hydrochloric Acid • Formaldehyde • Phthalic Anhydride
Maleic Anhydride • Ortho-Phenylphenol • Sodium Sulfite
Pentaerythritol • Pentachlorophenol • Sodium Pentachlorophenate
Sulfuric Acid • Methanol

REICHHOLD
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

Sodium Sesquisilicate—Sugar Cane Wax

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs. 6,000-19,900 lb lots, works 100 lbs 5.35 - —
dms., c.l., works 100 lbs 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq. 40° Be. 1:3.2, turbid, dms., c.l., works 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be., 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs 2.60 3.45
tanks works 100 lbs 1.90 —
52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs 3.00 3.50
tanks works 100 lbs 2.30 —
Solid, 1:3.2, bgs., works .... ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb .065 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms. 0.4c. per lb higher
Sodium stannate dms. works, frt. alld. E lb. .633 - .692
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate bbls. works lb. .22 - —
Sodium sulfate, NF VII, dried, powd. dms lb. .22½- —
Tech., anhye. bgs., c.l., dlvd. E. ton 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk c.l. works ton 32.00 —
USP, cryst., fib. dms. lb. .17½- .18

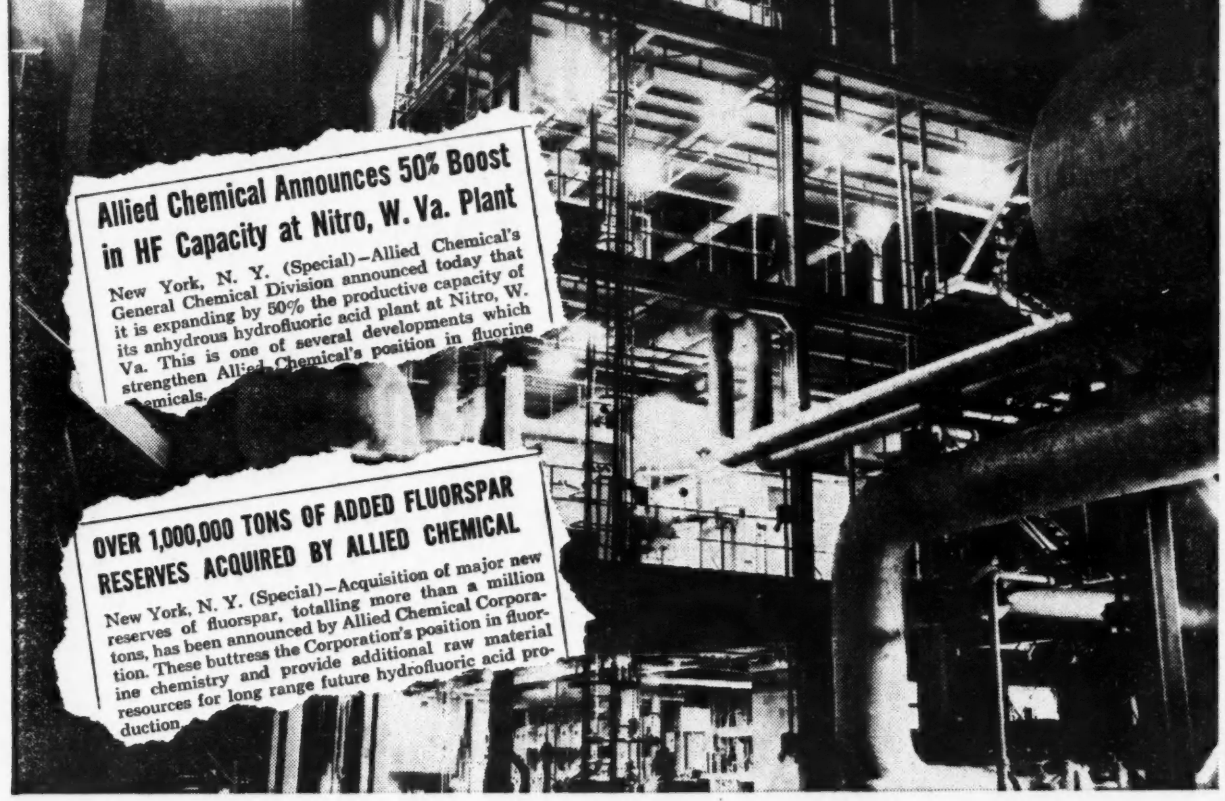
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt equald lb. .06 - —
dms. l.c.l., same basis lb .07 - —
Fused, bbls., c.l., works, E., frt. equald lb .05½- —
bbls. l.c.l., same basis lb .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP dms lb. .55 - .65
Tech. anhyd. dms., 1 ton lots or more works lb. .317 - —
dms. less than ton lots works lb. .337 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.l., frt. equald 100 lbs. 8.15 - —

Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs., l.c.l., t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb 14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld E. lb 35 - —
50-lb dms. c.l., frt alld E lb 35½- —
10-lb cns., c.l., frt alld E lb 42 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs 8.16 —
bgs., l.c.l., same basis 100 lbs 8.56 [illegible]
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs 8.95 —
bgs., l.c.l. works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., l.c.l. works 100 lbs. 10.20 -10.60
Sodium tungstate, tech. kgs dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 —
dms., l.c.l., same basis lb. .21½- —

Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .33 - —
fib. dms., smaller lots, same basis lb. .36 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .30½
Solvent naphtha, petroleum, straight aromatic, 310°F-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. .31 - —
Houston, Texas gal. .29 - —
355°F-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York gal. .32 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°F-265°F b.r., 31°C. m.a.p., tankcars New Jersey and New York gal. .235 - —
286°F-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York gal. .275 - —
319°F-380°F b.r., 27°C m.a.p., tankcars, New Jersey and New York gal. .285 - —
322°F-395°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal. .295 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib dms., 20,000-lb lots works lb. .34 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
Cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb 25 28
Powd., dms., c.l., works lb. .36 - —
dms. 1 to 5-ton lots, works. lb 38 39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb .25¼- —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23¾
Chemically isolated, new process, bgs., c.l. works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .20¾
Soybean meal, 44%, bulk, unrestricted, Decatur ton 57.00 - —
Soybean oil, crude, tanks, Decatur, lb. .08 - —
Foots, soapstock, acid 95%, tank, N. Y. lb. .05¼- —
Refd., alkali, dms. lb. .1230- .1255
tanks lb. .1030- —
clarified, dms. lb. .1180- .1205
tanks lb. .0980- —
salad, dms. lb. .1200- .1225
tanks lb. .1000- .1005
Soybean oil acids, Col. dist., dms., lb. .18 .20½
tanks lb. .15½- —
S. D., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom. bls lb 75 —
Spearmint oil, NF, dms. lb. 9.00 -11.75
Sperm oil, bleached, winter, 45° dms lb. .1475- .1575
tanks lb. .1275- —
Nat., winter, 45°, dms. lb. .1375- —
tanks lb. .1175- —
Spermaceti wax, blocks, cs lb. .31 - .33
Cakes, cs lb .32 .34
Spruce oil ens, dms. lb 2.10 3.55
Squill, white, bls lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible bls lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .803 - .825
Stannic oxide, dms., dlvd. lb. 1.06 - 1.07
Stannous chloride, annyd, dms., works lb. .995 - 1.250
Hydrous, cryst., dms., works lb. .86 - .87
Stannous sulfate, dms., works lb. 1.05 - 1.07
Star root (see Helonias root)
Stargrass root (see Aletris root)
Stavesacre seed, bgs lb. .60 .61
Stearic acid, dbl., pressed bgs lb. .15¾- .18¼
Single-pressed, bgs. lb. .15¼- .17¾
Triple-pressed, bgs. lb. .17½- .20
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .13 - —
Streptomycin sulfate, bulk, gram. .035 - .036
Strontium bromide, NF, cryst., 100-lb. dm. f.o.b. E lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots. lb 3.57 - —
Strontium nitrate, bgs., c.l., works, 100 lbs 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate NF, dms lb 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton 56.70 -66.15
Strophanthin G (see Ouabain, USP)
Strophanthin K, bots oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax gum, USP cs lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6% dms. c.l. frt alld. lb. .17 - —
dms., c.l., same basis lb. .19 - —
tanks, same basis lb. .14¼- —
Tech., 99.2%, dms., c.l. lb. .1472- —
dms., l.c.l., same basis lb. .1672- —
tanks, bulk, same basis lb. .1222- —

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots lb 1.25 1.45
Succinic acid., purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd. white bgs. refy lb. .0920- —
Sucrose acetate isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb lots bgs., l.c.l. works lb 1.00 —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb ctns works lb. .60 .65
80-lb. ctns., spot lb. .65 .75


Allied Chemical Announces 50% Boost in HF Capacity at Nitro, W. Va. Plant
New York, N. Y. (Special)—Allied Chemical's General Chemical Division announced today that it is expanding by 50% the productive capacity of its anhydrous hydrofluoric acid plant at Nitro, W. Va. This is one of several developments which strengthen Allied Chemical's position in fluorine chemicals.
OVER 1,000,000 TONS OF ADDED FLUORSPAR RESERVES ACQUIRED BY ALLIED CHEMICAL
New York, N. Y. (Special)—Acquisition of major new reserves of fluorspar, totalling more than a million tons, has been announced by Allied Chemical Corporation. These buttress the Corporation's position in fluorine chemistry and provide additional raw material resources for long range future hydrofluoric acid production.

2 More Big Reasons for Making General Chemical *Your HQ for HF*

General Chemical recently announced two developments of interest to every consumer of hydrofluoric acid—a 50% increase in anhydrous HF capacity at Nitro, W. Va., and the acquisition of more than 1,000,000 tons of additional fluorspar reserves. Both announcements underscore General's position as the nation's leading supplier of aqueous and anhydrous hydrofluoric acid.

Here are more good reasons why it pays to make General *your HQ for HF:*

Eight HF supply locations, three producing plants! General Chemical maintains eight HF supply points. Of these, three plants located in North Claymont, Delaware; Baton Rouge, Louisiana; and Nitro, West Virginia, make General Chemical the *only* supplier offering shipment of anhydrous as well as aqueous from more than one producing location.

In addition, General Chemical maintains five aqueous HF bulk storage and packaging stations at Buffalo, N. Y.; Chicago, Ill.; Cleveland, Ohio; El Segundo (Los Angeles), Calif.; and Pittsburgh, Pa. These five points back each other up and further assure service and availability of HF at all times, under all conditions.

Basic position! General Chemical owns and operates its own fluorspar mines and mills . . . and is the country's leading producer of sulfuric acid. This basic position in the essential raw materials for hydrofluoric acid production is your best assurance of dependable supply.

If you'd like more information as to how we can serve you, just drop us a line. Why not do it now?

Basic to America's Progress

Allied Chemical

GENERAL CHEMICAL DIVISION

40 Rector Street, New York 6, N. Y.

Sulfabenzamide, dms.	kilo	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo	9.00	10.10
Sulfacetamide, USP, fib dms.	kilo.	6.61	6.83
Sulfacetamide-sodium, USP, fib. dms	kilo	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	24.45
USP, powd., dms.	kilo	22.60	23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	25.90
Sulfaguanidine, NF X, dms	kilo	5.50	6.60
dms	kilo	23.50	24.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	20.75
USP XV, powd., dms	kilo.	18.75	19.85
Sulfamic acid cryst, dms., c.l., t.l., works	100 lbs.	16.00	—
dms, l.c.l., l.t.l., works	100 lbs.	17.50	18.50
Gran., dms., c.l., t.l. works	100 lbs.	14.75	—
dms., l.c.l., l.t.l., works	100 lbs.	16.25	17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald	lb.	1.50	—
NF, fib. dm., frt. equald	lb.	1.55	—
Sulfanilamide quinoxaline, veterinary dms	kilo	16.28	—
Sulfanilic acid, tech. dms. c.l., frt alld	lb	.21	—
dms., l.c.l. frt alld	lb	.23	—
Sulfapyridine USP XV powd bots tins	kilo	15.45	16.55
Sulfapyridine-sodium monohydrate dms	kilo	16.55	17.65
Sulfathiazole NF X, microcrystals, dms	kilo.	6.25	6.90
NF X, powd., dms.	kilo.	5.50	6.15
Sulfathiazole-sodium NF X dms, 1,000 lb lots or more	lb	2.35	—
Sulfur, coml flour, bgs. mines	100 lbs	2.35	—
bbls mines	100 lbs	3.30	—
lump, bgs., mines	100 lbs	2.25	—
bbls mines	100 lbs	2.80	—
Crude, dom., bright, bulk, f.o.b. cars, mines, long-ton		23.50	—
Crude, export, f.o.b. vessels, Gulf ports, long-ton		25.00	—
US and Canada f.o.b vessels Gulf ports long-ton		25.00	—
Domestic dark sulfur prices are $1 per long ton lower			
Sulfur, crude, imp., Mexican, bulk, filtered f.o.b vessel Coatzacoalcos long-ton		24.00	—
Mexican dark sulfur price is $1 per long ton lower			
Sulfur, refd, flowers, NF, bgs., mines	100 lbs	5.65	—
bbls., mines	100 lbs.	7.00	—
flour, light, bgs., mines	100 lbs.	5.25	—
bbls., mines	100 lbs	6.25	—
lump, bgs., mines	100 lbs	4.95	—
rolls, bgs., mines	100 lbs	5.50	—
bbls., mines	100 lbs	6.25	—
salt block, bgs., mines	100 lbs.	4.65	—
virgin block bbls mines	100 lbs	4.70	—
Sulfur rubbermakers, coml., rcg., bgs mines	100 lbs	2.45	—
bbls mines	100 lbs	3.70	—
98-100% passing through .325 mesh bgs mines	100 lbs	2.55	—
bbls mines	100 lbs	3.80	—
refd., bgs mines	100 lbs	4.90	—
bbls., mines	100 lbs	6.05	—
treated 2.5% mineral oil bgs., mines	100 lbs	2.75	—
bbls. mines	100 lbs	4.00	—
Sulfur dichloride ret dms c.l., works, frt. equald	lb.	.05¼	—
ret. dms., l.c.l., same basis	lb.	.05¼	—
tanks, same basis	lb.	.04½	—
Sulfur dioxide liq coml cyls., works frt equald	lb	.10	.12
multi unit cars works	lb	.0535	—
tanks works	lb	.045	—
Sulfur dioxide, refrigeration, cyls., divd	lb.	.33	—
Sulfur monochloride 55 gal non ret. dms., c.l., frt. equald	lb.	.05¼	—
dms, l.c.l., same basis	lb.	.05¼	—
tanks, same basis	lb.	.04½	—
Sulfuric acid 60° Be cbys., c.l., works	100 lbs	2.00	—
cbys., l.c.l., works	100 lbs	2.30	—
tanks works	ton	18.60	—
66° Be cbys c.l., works	100 lbs	2.25	—
cbys., l.c.l works	100 lbs	2.55	3.35
tanks works	ton	22.35	—
98% tanks, works	ton.	23.50	—
99% tanks works	ton	23.70	—
100% tanks works	ton.	24.95	—
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾	—
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis	lb.	.14¼	.14¾
5-pt bots, extra cs, c.l. works, frt alld	lb.	16¼	—
5-pt bots, extra cs l.c.l. same basis	lb	17¾	.18¾
Sulfuric acid fuming (oleum) 20% tanks, works	ton	25.00	—
40% tanks, works	ton	29.00	—
65% tanks works	ton	39.50	—
Superphosphate run of pile under 22% a.p.a. pulv bulk., c.l. Baltimore unit-ton		.90	.93
bulk c.l. Carteret N J unit-ton.		.90	.93
bulk f.o.b vessel unit-ton		1.02	—
Superphosphate triple 48% or more a.p.a., pulv., bulk c.l., East Tampa Fla unit-ton		.98	—
Sweet birch oil, USP, northern, cns	lb	4.00	9.50
USP southern, cns	lb	2.00	3.05

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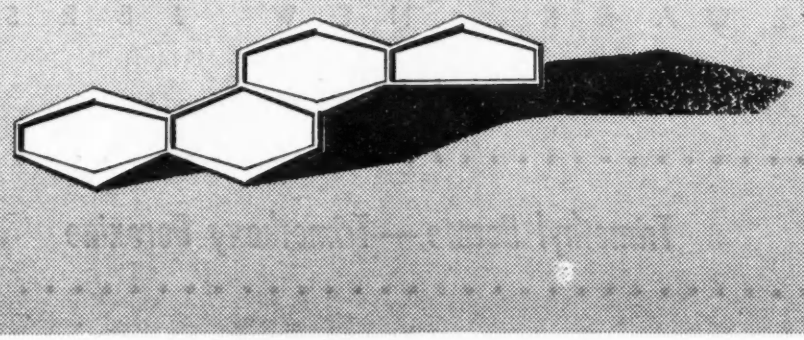
2,4,5-T dms. c.l. works frt equald	lb	1.18	—
dms. l.c.l. same basis	lb	1.25	—
2,4,5-T isopropyl ester, dms., c.l., works frt equald	lb	1.24	—
dms. l.c.l. works	lb	1.29	—
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	—
bgs. l.c.l., works	ton.	31.00	36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00	—
bgs. l.c.l. works	ton	34.00	—
fibrous, 99.95%, 400 mesh, micronized bgs., c.l., works.	ton.	38.00	—
625 mesh, micronized, bgs. c.l. works	ton.	80.00	—
ord., Calif., grd., bgs., c.l., works	ton	34.00	39.50
Vermont, off-color grd., bgs., c.l., works	ton	19.40	—
bgs. l.c.l. works	ton	37.00	—
Imp. Canadian grd. bgs., c.l., mines	ton	20.00	35.00
Tall oil, crude, dms., c.l., works	lb.	.04½	.04¾
tanks, works	lb.	.02¾	.03
Dist., depending on grade, dms., c.l., works	lb.	.07¾	.10
dms., l.c.l., works	lb.	.08	.10¼
tanks, works	lb.	.05¾	.08
Refd., depending upon grade, dms., c.l., works	lb.	.07¼	.09¼
dms., l.c.l., works	lb.	.07½	.09¾
tanks, works	lb.	.05¼	.07¼
Tall oil acids, dms., c.l., works	lb.	.07	.10
dms., l.c.l.	lb.	.07½	.10¼
tanks, works	lb.	.05	.08
Tallow, edible, tanks, dlvd.	lb.	.06¼	.06¾
Inedible, fancy, bleachable, tanks,	lb.	.06¼	—
fancy, guaranteed, bulk, f.o.b. steamer	lb.	.06⅞	—
dms., f.a.s.	lb.	.07⅛	—
tanks, dlvd.	lb.	.06½	—
No. 1, tanks, dlvd.	lb.	.05⅝	—
prime, tanks, dlvd.	lb.	.06	—
special tanks, dlvd.	lb.	.05⅞	—
sulfonated, 25%, bbls., l.c.l.	lb.	.06½	.06¾
50%, bbls., l.c.l.	lb.	.10½	.11
Tallow acids, dist., dms.	lb.	.13¼	.15¾
tanks	lb.	.10¾	—
Hydrogenated, dms.	lb.	.14¾	.17¼
Tallow oil acidless, dms. c.l.	lb.	.13½	Nom
dms. l.c.l.	lb.	14½	16
Tangerine oil, Florida, dms.	lb.	4.25	4.75
Tankage animal, feeding 9-11% ammonia, New York bulk,	unit-ton.	5.25	5.75
Tannic acid NF fluffy bbls, 1,000-lb lots	lb	2.05	—
bbls., smaller lots	lb	2.06	2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls., smaller lots	lb	1.96	1.99
Tech dms	lb	1.05	—
Tansy oil, dms.	lb.	6.60	8.00
Tar acid oil, 15-18% dms., c.l., frt equald	gal	.53½	—
dms., l.c.l., same basis	gal.	.55½	—
tanks, same basis	gal.	.43½	—
25-28% dms, c.l. same basis	gal	.60	—
dms., l.c.l., same basis	gal	.62	—
tanks same basis	gal	.50	—
50-53%, dms., c.l., same basis	gal.	.75	—
dms., l.c.l., same basis	gal	.77	—
tanks same basis	gal	.65	—
Tar coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid, NF, 100-lb bgs., c.l., frt. equald	lb.	.41	—
bgs., 10,000 lbs., 1 shipt., same basis	lb.	.43	—
bgs. smaller lots, same basis	lb.	.47	—
Terpine hydrate NF, cryst. powd., 100-lb fib dms	lb.	.70	—
Terpineol extra, dms.	lb	.50	.60
Prime, dms.	lb	.40	.50
Terpinyl acetate, extra, cns, dms	lb	.64	.75
Prime, dms.	lb	.53	.56
Terpinyl propionate dms.	lb	1.75	3.00
Terra alba (see Gypsum).			
Testosterone USP bots.	gram	No prices	
Testosterone proprionate USP bots.	gram	No prices.	
Tetrachloroethane, dms. works	lb	14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate)			
Tetrachloroethylene tech (see Perchloroethylene)			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb	20½	—
dms, l.c.l. works	lb	22	.23½
Tetraethyl orthosilicate dms., c.l., dlvd E	lb	60	—
dms, l.c.l. dlvd E	lb	61½	—
Tetraethyl pyrophosphate, 40%, cns., dms. frt equald	lb	75	—
Tetraethylenepentamine dms., c.l., dlvd E	lb	53½	—
dms., l.c.l., dlvd E.	lb	.55	—
tanks, dlvd E	lb	.51	—
Tetraethylthiuram disulfide, tech. dms., frt alld	lb	1.04	—
Tetrahydrofuran, dms. c.l., t.l., works	lb	36½	—
dms., l.c.l., or l.t.l., works	lb	37	—
tanks, works	lb	35	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn	lb	31½	—
dms., l.c.l., Memphis, Tenn	lb	32½	—
dms., c.l., t.l., Newark N.J	lb	33½	—
dms., l.c.l., Newark, N.J	lb	34½	—
tanks dlvd E of Denver	lb	31	—
tanks dlvd W of Denver	lb	32	—
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E	lb.	.39	—
l.c.l., l.t.l., same basis	lb.	.41	—
Tetrapotassium phosphate (see potassium phosphate)			
Thallium metal dlvd	lb	7.50	10.00
Thallium sulfate 99% bots. dlvd	lb	5.00	10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works	lb.	4.40	4.75
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works.	lb.	6.45	—
Theobromine sodio-salicylate, NF, fib. dms., 500-lbs., works	lb.	3.80	—
Theophyline, USP, anhyd. 100-lb dms., frt. alld	lb.	3.65	—
Thiamine hydrochloride, USP, fib. dms., frt. alld	kilo.	36.00	—
USP, ampule grade, fib. dms., frt alld	kilo.	38.00	—
Thiamine mononitrate, USP, fib dms., frt. alld	kilo.	36.00	—

a new standard of leadership...



HARDLY MORE THAN A DECADE AGO, Syntex made its first major contribution in the field of steroid hormones through the development of important new sources of supply — a development which has not only helped to satisfy today's large demand for these hormones, but has been a vital factor in reducing the cost of hormone intermediates.

Today Syntex continues to serve as an important supplier of hormones and intermediates to the pharmaceutical industry. By continued research and constant improvement of production techniques, Syntex has helped to raise the standards of quality and dependability in this significant field of medicine.

one great source of
steroid hormones and intermediates

SYNTEX

Write to: SYNTEX CHEMICAL COMPANY, INC.
10 East 40th Street, New York 16, N. Y.

Thiocarbanilide, dms., ton lots lb. .72 • —
dms., less ton lots ..... lb. .74 • —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA., kgs., works lb. 5.20 • —
Tungstated, PTMA, kgs., works. lb. 6.20 • —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb. 1.15 • —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb 4.00 • —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 • —
bgs., ton lots, same basis lb. .32 • —
bgs., less than ton lots, same basis lb. .33 • —
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works lb 3.50 • —
dl-Threonine, bots., 1-kilo lots, kilo.275.00 • —
Thyme leaves, French, bgs .. lb .29 • —
Spanish, bgs. ..... lb. .14 • —
Thyme oil, NF, red, cns., dms lb. 1.90 • 2.25
NF, white, cns. ..... lb. 2.20 • 2.60
Tech white cns ..... lb .40 1.85
Thymol, fib. dms., 25-lbs., f.o.b. works. lb. 3.06 • —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.40 • —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).

Tin metal (Straits) ..... lb. 1.00 • —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. ..... lb. .26½- —
reg., bgs., c.l., dlvd ..... lb. .25½- —
bgs., l.c.l., dlvd ..... lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton.180.00 • —
bgs., 5-ton lots, Niagara, Falls, N.Y. ton.205.00 • —
bgs., ton lots, same basis, ton.215.00 • —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd, E lb. .27½- —
bgs., l.c.l., dlvd, E ..... lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works ..... lb. .09¾- —
80% Ti O_2, high-tinting, dms. c.l. lb. .14¾- —
dms., l.c.l. ..... lb. .14¾- —
Titanium hydride, powd., dms., works. lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 • —
dms., l.c.l., works ..... lb. .27½- .29
tanks, works ..... lb. .20 • —

Tobias acid, dms., c.l., t.l. ..... lb. .78 • —
dms., l.c.l. ..... lb. .81 • —
d-a Tocopherols, NF, mixer, conc., pure basis, bots kilo.67.00 • —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 • —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 • —
dl-a-Tocopherol, bots ..... kilo.99.00 • —
dl-a-Tocopheryl acetate, bots ... kilo.90.00 • —
25% dry. powd., bots. ..... kilo.22.50 -24.00
33% dry. powd., bots. ..... kilo.30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 • —
Paste, kgs., 100% basis .... lb 1.50 • —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis lb. 1.50 • —
Tolu balsam, cns. ..... lb. 3.00 • 3.25
Toluene, coaltar, indust. or nitration tanks, dlvd. E. of Rockies gal. .25 • —
Toluene, petroleum indust., tanks, dlvd E. of Rockies gal. .45 • .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 • —
dms., l.t.l., same basis lb. .63 • —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld. lb. .16 • —
1,000-lb. or more, same basis lb. .18 • —
less than 1,000-lb., same basis lb. .23 • —
tanks, same basis ..... lb. .14 • —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 • —
dms., 125 lbs. to t.l. ..... lb. 1.00 • —

m-Toluidine, dms., c.l., works, frt. alld. lb. .83 • —
dms., l.c.l., same basis ..... lb. .84 • —
tanks, same basis ..... lb. .82 • —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 • —
dms., l.c.l., same basis ..... lb. .31 • —
tanks, same basis ..... lb. .28 • —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 • —
Cast, dms. frt. alld ..... lb. .45 • —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 • —
Light shades, kgs., works. ..... lb. 1.70 • —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 • —
Tonka beans, Angostura, cks. .... lb. 1.50 • —
Brazilian, Surinam, cs. ..... lb. 1.30 • —
Totaquine, 100-oz. lots, ens. ..... oz. .42 • —
Toxaphene, dms., c.l., t.l., works. lb. .22 • —
dms., l.c.l., t.l., works ..... lb. .28 • —
Tragacanth gum, No. 1, ribbons, cs. lb. 3.85 - 3.90
No. 2, cs. ..... lb. 3.40 - 3.60
No. 3, cs. ..... lb. 3.15 - 3.25
USP, powd., bbls. ..... lb. 1.05 - 1.15
Triacetin, dms., c.l., dlvd, E. of Rockies lb. .39 • —
dms., l.c.l., same basis. ..... lb. .40 • —
tanks, same basis. ..... lb. .37 • —
Triallylamine, dms., c.l., dlvd. ..lb .985 • —
dms., l.c.l., dlvd. ..... lb. .995 • —
tanks, dlvd. ..... lb. .96 • —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld E of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E of Denver lb. .40 • —
Tributyl phosphate, dms. c.l., works. lb. .52½- —
dms., l.c.l., same basis. ..... lb. .53½- —
tanks, same basis. ..... lb. .50 • —
Tributylamine dms., c.l., works lb .67½- —
dms., l.c.l., same basis ..... lb. .69 • —
tanks, same basis. ..... lb. .65 • —
Tributyrin, dms., l.c.l., dlvd. .... lb. .69 • —
Trichloroacetic acid, bots. ..... lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 • —
dms., l.c.l., frt. alld E. ..... lb. .16 • —
tanks, frt. alld. E. ..... lb. .13¼- —
Trichlorobenzene prices in the West 1¼c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. ..... lb. .14¼- —
tanks, dlvd. ..... lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E. ..... lb. .14¼- —
tanks, works ..... lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., dlvd. lb. .14 • —
dms., l.c.l., dlvd. ..... lb. .15¼- —
tanks, dlvd. ..... lb. .12¼- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., l.c.l., same basis ..... lb. .75 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ref chys. works, frt. adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 • —
dms., l.c.l., dlvd. ..... lb. .36 • —
tanks, dlvd ..... lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd ..... lb. .35½- —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms. c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E ..... lb. .28 • —
tanks, dlvd E ..... lb. .24 • —
Triethanolamine dms. c.l. dlvd E. lb. .24½- —
dms., l.c.l., same basis ..... lb. .26 • —
tanks, same basis ..... lb. .22 • —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. ..... lb. .26½- —
tanks, frt alld ..... lb. .24½- —
Triethylamine, dms., c.l., dlvd. E. lb. .50 • —
dms., l.c.l., same basis ..... lb. .51½- —
tanks, same basis ..... lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt alld. E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. ..... lb. .41½- —
tanks, dlvd ..... lb. .38 • —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 • —
dms., l.c.l., dlvd. E. ..... lb. .22½- —
tanks, same basis ..... lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. ..... lb. .53 • —
tanks, dlvd E ..... lb. .49 • —
Triisobutylene, tanks, dlvd ..... lb. .08 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd E. ..... lb. .24¾- —
tanks, dlvd E. ..... lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 • .305
tanks, frt. equald, 100% basis. lb. .26 • —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis. lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 • —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 • —
dms., l.c.l., l.t.l., same basis lb. .36 • —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 • —
dms., l.c.l., works ..... lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E. lb. .40 • —
bgs., l.c.l., l.t.l., dlvd E. ..... lb. .41 • —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., l.c.l., frt. equald ..... lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene, dms., c.l., dlvd. E. gal. .44 • —
dms., l.c.l., same basis ..... gal. .54 • —
tanks, same basis ..... gal. .28 • —
Tripropylene glycol dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., l.c.l., l.t.l., frt. alld. E. lb. .22 • —
tankcars and compartmented tankcars, frt. alld. E. lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min., frt. alld. E. lb. .18 • —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 • —
Tung oil, dms., c.l., New York. .lb. .23¾- —
dms., l.c.l., New York. ..... lb. .24 • .24½
tanks, imported, N. Y. ..... lb. .21½- .22
tanks, domestic, mills ..... lb. .21⅜- .21½

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Tungsten metal, powd., 2.0-2.5 microns, dms., works..lb. 4.25 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works..lb. 2.25 • —
dms., smaller lots, works...lb. 2.45 • —
Turkey red, bbls., works.....lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 • .30
Tuscan red, bbls., frt. equald..lb. .26 • .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd, E. of Rockies..lb. .35 • .39½
Jobbing types, bbls., same basis.lb. .19 • —
Regular types, dry, bbls., same basis lb. .22½ • .35
Ultramarine blue prices 1c higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l. works lb. .07½ • .07¾
bgs. l.c.l. works lb. .07¾ • .08
Burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .03¼ • —
Raw, American, bgs., works...lb. .07¾ • .03¼
Turkey-type, bgs., works....lb. .08½ • .08¾
Undecylenic acid, dms.....lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N, indust., bgs., c.l. t.l., dlvd E ton 125.00 • —
bgs., l.c.l. dlvd E ex whse. ton.145.00 • —
45% N, agricultural, bgs., c.l., 30 tons/ dlvd E ton.103.00 • —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 • —
37 grade, tanks, same basis ton.145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 • —
dms., l.c.l., same basis.....lb. .70 • —
Uva-ursi leaves, bls.....lb. .12 • —

V

Valerian root, Belgian, bgs.....lb. .32 • —
Indian, bgs.....lb. .25 • —
dl Valine, dms, works.....lb. 21.00 -27.50
Vanadium pentoxide, tech., dms., works lb 1.28 1.33
Vandyke brown, bbls, works lb .09½ • .12
Vanilla beans, Bourbon, tins..lb. 14.25 • —
Mexican, cuts, tins.....lb. 14.25 • —
whole, tins.....lb. 14.75 • —
Vanillin ex lignin, 100-lb fib dms., 1,000-lb. lots or more lb 3.00 • —
100-lb fib dms, 500-lb lots lb 3.10 • —
100-lb fib dms cns, 100-lb. lots lb 3.25 • 3.33
Venetian red, fobbing, bgs., works, lb. .04¾ • —
Venetian red, 20%, bgs, works lb. .05¾ • —
25% bgs, works.....lb. .05¾ • —
30% bgs, works.....lb. .06 • —
35% bgs, works.....lb. .06¾ • —
40% bgs, works.....lb. .06¾ • —
Vetiver oil, Bourbon, cns.....lb. 16.50 -17.50
Haitian, cns.....lb. 14.00 -15.50
Victoria blue toner, molybdated, PMA 250-lb bbls, dlvd, E. of Rockies lb. 4.50 • 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd, E. of Rockies...lb. 5.55 • —
Victoria blue toner, bbls, prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l. dlvd lb. .20 • —
55-gal dms, l.c.l., dlvd...lb. .21½ • —
tanks, dlvd.....lb. .17½ • —
tanktrucks less than 4,000 gal., dlvd lb .18 • —
Zone 2, 55 gal. dms., c.l., dlvd..lb. .21 • —
55-gal dms, l.c.l., dlvd.....lb. .24 • —
tanks, dlvd.....lb. .18½ • —
tanktrucks, less than 4,000 gals., dlvd lb. .19 • —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .125 • —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether, tech, dms., c.l., works lb. .29½ • —
dms., l.c.l., works.....lb. .30 • —
tanks, works.....lb. .27½ • —
Vinyl propionate monomer, dms., c.l. dlvd lb. .49 • —
dms., l.c.l., same basis.....lb. .50 • —
tanks, same basis.....lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works.....lb. 1.35 • —
tanks, works.....lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works, lb. .16½ • —
dms., l.c.l., same basis.....lb. .18½ • —
tanks, f.o.b. dest, frt prepaid lb. .14 • —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram bots., lots of 10 billion USP units 1,000,000 units. 02½ • —
Virginia type red, bbls., works lb. 1.40 • —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07½ • —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 • —
325,000 units per gram, same basis kilo 43.88 • —
250,000 units per gram, same basis kilo.33.75 • —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .09½ • —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½ • —
1,000,000 A units per gram, 1,000,000 units. .09½ • —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram.120.00 • —
0.1% vitamin B_{12} USP, adsorbed on gelatin, 100 and 500-gram bots, on 1-5 kilo dms. gram. 1.43 • —
0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 • —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity gram.110.00 • —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.138.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.18 • —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram. 1.18 • —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 • —
850,000 units per gram less than kilo lots kilo 45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram. 4.50 —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls.....lb. 2.00 • 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb. 2.03 • —
dms., 5-24-lb. lots, New York or Chicago lb 2.15 • —
Watchung-type reds, bbls.....lb 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms...gal. 12.25 • —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls....lb. .21 • .23
White precipitate, USP, powd. dms., lb. 6.55 • —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls. lb. .22 • —
Thin, rossed, bls.....lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb 6.35 -17.50
USP, nat., southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls.....lb .16 .17
Witch hazel leaves, bls.....lb. .23 • .30
Wollastonite, fine bgs., c.l., works ton 39.50 • —
bgs., l.c.l., ex whse.....ton 56.00 • —
Medium, bgs., c.l., works..ton.27.00 • —
bgs., l.c.l., ex whse.....ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant bgs.....lb. 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns.....lb. 4.75 • 5.00

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa.....gal. .29 • —
Birmingham dist.....gal. .29 • —
Chicago dist.....gal. .28½ • —
Cleveland dist.....gal. .29 • —
Geneva, Utah.....gal. .29 • —
Xylene, coaltar, indust., tanks, works:
Johnstown, Pa.....gal .29 —
Lackawanna, N. Y.....gal .29½ —
Lone Star, Tex.....gal .27 —
Lorain, Ohio.....gal .29 —
Middletown Ohio.....gal .30 —
Minnequa, Col.....gal .29 —
Philadelphia dist.....gal .29 —
Pittsburgh dist.....gal .29 —
Sparrows Point, Md.....gal .29 —
Terre Haute, Ind.....gal .29 —
Youngstown Ohio.....gal .29 —
f.o.b. works
Xylene, petroleum, indust., tanks
Bayonne, N. J.....gal .29 —
Baytown, Tex.....gal .27 —
Charleston, S. C.....gal .29 —
Chicago, Ill.....gal. .28½ —
Detroit, Mich., dlvd. ..gal. .27½ .29
Houston, Tex.....gal .27 —
Philadelphia, Pa.....gal .29 —
Providence, R. I.....gal .30 —
Sewell's Point, Va.....gal .28 —
Wood River, Ill.....gal .28½ —
m-Xylene, 95%, dms., c.l., frt. alld.lb. .25 • —
dms., l.c.l., frt. alld.....lb. .26 • —
tanks, frt. alld.....lb. .23 • —
o-Xylene, dms., c.l., works.....lb. .08 • —
dms., l.c.l. works.....lb. .09 • —
tanks, works.....lb. .06 • .06¼
p-Xylene, dms., c.l., works.....lb. .20 • —
dms., l.c.l., works.....lb. .21 • —
tanks, frt. alld.....lb. .16 45 • —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .23 • —
56°-58° C., m.p., dms., l.c.l., works, frt. equald lb .33 —

—Continued on page 79

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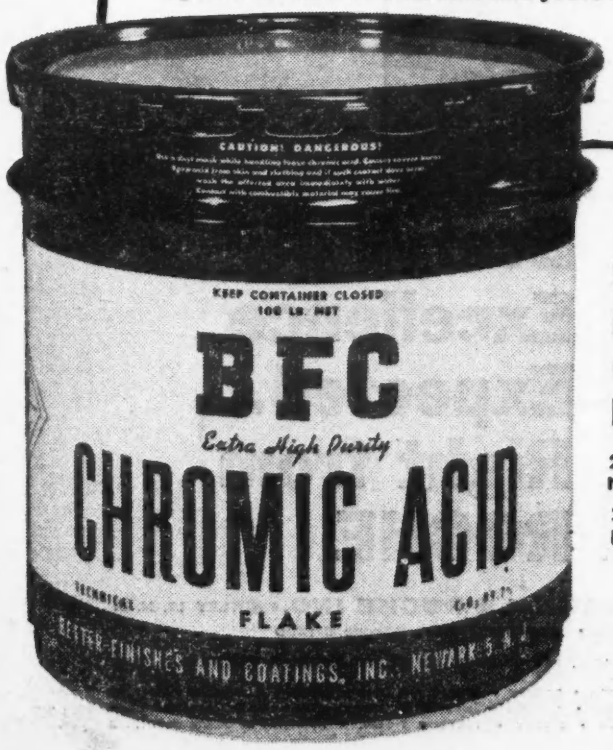

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Heavy Chemicals

Easing buying interest, a dip neither deeper nor shallower than expected when a price advance has been sniffed in the wind many weeks before its effective date, was noted in chlorine at the start of the second quarter as price listings rose a uniform $2 a ton, an advance which, also as expected, imparted a stronger tone to neighboring alkalis, most notably caustic soda, where a tendency toward weakness had previously been observed but is now seen yielding to an even keel for the balance of the quarter, in the opinion of observers, who, as a corollary, rule out any spectacular rise in buying interest until next fall and with equal certainty foresee no gnashing of teeth in the heavy chemicals market.

Following the flak of vigorous price action on April 1, quotations of heavy chemicals have been steady at list levels with the exception of sulfur and the large-volume acids which have for many months been subject to stable but geographically spotty discounts.

The American Paper and Pulp Association reported production for the week ended April 2, at 97.3 percent of theoretical capacity as compared with the revised figure of 99.5 percent for the previous week and 90.4 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
106.88	106.88	106.84	104.84

For Current Prices See Page 11

Acids

Hydrochloric—With its general steadiness, together with soft spots deriving from byproduct muriatic acid, the price picture for hydrochloric remains unchanged from a position of many months' standing.

In a preliminary report from the Census Bureau, output of this acid during 1959 is tallied at 1,035,999 tons, a spectacular rise over a 1958 total of 848,487 tons, achieved against the undertow of a 177-day standstill in steel.

Hydrofluoric — From Census Bureau comes a preliminary report tabbing 1959 HF output at 102,854 tons, up sharply from 84,377 tons in the previous year

Nitric—Replacing the now seasonally vanished fertilizer demand is active call from a variety of industrial outlets. Prices by and large are steady with no indications of a change in list. Supplies are adequate.

Output of nitric acid during 1959, says Census Bureau in a preliminary tally, totaled 3,073,852 short tons, a smart stride ahead of 1958's 2,704,062 tons.

Sulfuric—A check with producers indicates no plans to alter list prices so as to form with shaded levels prevailing at East coast points. While these actual prices have become comparatively stabilized, the pattern is too spotty geographically to make a list change practicable, observers of the market say.

It turns out that 1959 was a red-letter year industrially even though it might have appeared only moderately good from weekly concurrent reports and all the sack cloth and ashes talk at the time of the steel strike. For sulfuric acid, keystone chemical of industry, was produced in the amount of 17,518,509 tons in 1959, reports Census Bureau, out of earshot of 1958's 15,950,199 tons.

American Iron & Steel Institute estimates steel production during the week just ended at 2,447,000 tons, or 85.9 percent of capacity, as compared with an actual total of 2,527,000 tons or 88.7 percent of capacity during the previous week.

Output a month ago, according to records of the Institute, amounted to 2,654,000 tons; a year ago it reached 2,641,000 tons.

Bases and Salts

Aluminum Sulfate—Production of commercial alum amounted to 897,068 tons in 1959, a respectable rise over a 1958 total of 824,498 tons, while iron-free alum output totaled 50,617 tons, up from 43,516 tons in '58, reports the Census Bureau in a preliminary estimate.

Caustic Soda — Market shows good strength, waxing healthy from well-sustained buying interest and the firmer price of a major competing alkali, chlorine. In the months ahead observers see neither gnashing of teeth nor cause for immoderate enthusiasm from the bleachers, but an even keel, as it were.

Chlorine—A dip, neither more nor less than expected when a price advance has been sniffed in the wind many weeks before the effective date, was noted in buying interest with the start of the second quarter as price listings advanced a uniform $2 a ton.

Chlorine gathered more than a fair share of the laurels carried by booming 1959, it appears from a preliminary production report of the Census Bureau. Output of the alkali, says Census, amounted to 4,284,583 tons, up Canaveralwise from only 3,604,538 tons in '58.

Soda Ash—Glass business could hardly be brisker, nor supplies in better balance, nor prices pegged more snugly in place, seasoned observers indicate. Census Bureau, in a preliminary report, tallies 1959 ash output at 4,896,287 tons of synthetic material, up from 4,324,160 tons in '58, and 715,330 tons of natural, up from a '58 total of 626,761 tons.

Nonferrous Metals

Copper—Mines production in the US in January soared to 48,300 tons, almost double that of the preceding month, reports the Mines Bureau.

Substantial increases were reported in all sectors as operations got underway on a full-month basis for the first time since strikes gripped the industry in August 1959.

Smelter and refinery output from domestic and foreign primary materials was the largest since July of last year, and refined copper from secondary sources was the largest since June, Mines adds.

Consumption of refined copper during

Inorganic Chemicals Output: January

The following figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons.

	January	December
Aluminum Chloride anhyd.	2,231	2,218
liq. cryst.	2,096	2,302
Aluminum sulfate coml.	71,634	*71,965
iron-free	4,221	4,636
Calcium carbide	92,181	103,883
Carbon dioxide, liq., gas. solid	38,909	39,833
	27,866	30,787
Chlorine gas	385,253	379,524
Hydrochloric acid	94,880	90,665
Hydrofluoric acid	9,635	8,997
Hydrogen peroxide	2,319	2,780
Nitric acid	287,981	288,268
Phosphoric acid	162,443	158,243
Phosphorus, elemental	33,349	*31,636
Phosphorus oxychloride	1,979	1,983
Phosphorus trichloride	1,830	2,003
Potash, caustic, liq.	7,809	7,935
Solid	1,698	1,684
Soda ash, syn., light	163,515	211,637
dense	170,384	166,222
Soda ash, natural	59,445	64,068
Soda, caustic, liquid	415,423	403,975
dry	42,768	42,393
Sodium bichromate and chromate	11,627	10,377
Sodium chlorate	8,392	7,821
Sodium hydrosulfite	2,723	2,813
Sodium metal	9,728	9,649
Sodium phosphate, tribasic	4,407	3,427
Meta	5,303	5,261
Tetra	8,064	8,990
Acid pyro	1,405	1,616
Tripoly	51,709	55,075
Sodium silicate	30,374	40,904
Sodium sulfate, anhyd.	24,238	*23,128
Glaubers salt	7,907	*7,185
Salt cake, crude	64,654	66,066
Sulfuric acid, gross	1,589,402	1,528,271

* Revised.

Heavy Chemicals

the month totaled 109,800 tons, up five percent from December, notes Mines.

In a report from Business & Defense Services Administration, brass mill consumption of refined copper was reported 23 percent off in January from the level of January 1959, but copper-base scrap was at a rate 21 percent higher.

Brass mill consumption of refined copper was at 40,000 tons, BDSA reports, and that of scrap at 35,000 tons. During the seven months preceding the copper strike, BDSA recalls, average monthly consumption at brass mills was 52,000 tons of refined copper and 30,000 tons of scrap.

Lead—Prices were steady against moderate sales.

Mercury—Snug supply and light demand, working the market to a static position, left prices unchanged at a range of $215 to $217 a flask, large lots, immediate delivery, the spread reflecting quantity.

Silver—Still unchanged at 91⅜c. a troy ounce, spot.

Tin—Price reported steady at $1 a pound, spot, Friday.

Polyvinyl Chemicals Adds To Its Present Lab Facilities

Polyvinyl Chemicals, Inc., Peabody, Mass., has completed an expansion program that has added 5,000 square feet to its laboratory and administrative facilities.

Included is a new polymer pilot plant and an expansion of the present polymer emulsion plant's capacity by 2,000 pounds of product.

Food Additives Extension

—Continued from page 3

ances. The substances, along with the limits and specified uses, are:

Aluminum stearate, as a constituent of chewing gum base.

Calcium disodium-ethylenediamine tetraacetic acid dihydrate, 25 parts per million, as a sequestrant in malt beverages; 75 parts per million, as a whites; 0.35 percent, in nonstandardized bakery sequestrant in canned pineapple chunks (nonstandardized article).

Calcium stearyl-2-lactylate, 0.5 percent, in egg white solids; 0.05 percent, in liquid and frozen egg products.

Disodium dihydrogen-ethylenediamine tetraacetic acid, 75 parts per million, as a sequestrant in canned pineapple chunks (nonstandardized article).

Fat (animal and vegetable), hydrolyzed (free of toxic impurities), 12.5 percent, in feed for livestock and poultry.

Hydrogen cyanide, 25 parts per million, as a residue from the use of hydrogen cyanide as a fumigant.

Isobutylene-isoprene, as a constituent of chewing gum base.

Mineral oil, 3.3 parts per million, as a constituent of defoaming agent used in manufacture of beet sugar.

Polyethylene glycol 400 monooleate, 10 percent of fat content, to emulsify the fat and as defoaming agent in calf-feed milk replacer.

Polysorbate 80, as a solubilizer in essential oils.

Sodium lauryl sulfate, 125 parts per million, as a stabilizer in liquid and frozen egg whites; 1,000 parts per million, as a stabilizer in egg white solids; 10 parts per million, in cured tuna fish; 20 part per million, in canned pet animal food containing fish and/or meat.

Sodium dodecylbenzene sulfonate, 2 parts per million, in fruits and vegetables as residue from its use as a detergent.

di-Starch phosphate (amylopectin reacted with sodium trimetaphosphate), 5 percent, as a modified starch in food.

Trichloroethylene, 10 parts per million, as a residual solvent in manufacture of decaffeinated coffee.

Ultramarine blue, 0.30 percent, in salt for animal feeds.

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Executives Advanced by Pennsalt

PENNSALT UNIT HEADS: Three operating division managers have just been named by Pennsalt Chemicals Corporation, Philadelphia. James McWhirter (left) has become general manager of the industrial chemicals division, east, and Glen E. More (center) has been given a similar position for the west. J. Drake Watson (right) has been named general manager of the company's agricultural chemicals division. All three are veteran Pennsalt executives who have moved up as part of an overall shift in personnel. The company has, at the same time, announced the appointment of J. Gordon Logue (not pictured) who will serve as director of personnel.

USDA Okays Financing For Oil Purchase by Poland

Department of Agriculture has issued authorizations to Poland to finance purchase of $1,825,000 worth of cottonseed oil or soybean oil and a total of $1,272,745 worth (including certain ocean transportation costs) of upland cotton from U. S. suppliers under Title I of Public Law 480.

Authorization No. 41-33 provides for the purchase of about 7,000 metric tons of cottonseed or soybean oil in bulk, 50/55 gallon drums (basis: refined soybean oil in drums). Vegetable oil shortening and margarine will not be eligible for financing.

Sales contracts made between April 13 and June 30 will be eligible for financing. Delivery will be to importer, f.o.b. vessel US ports in the case of bulk oil, and f.a.s. vessel US ports in the case of oil in drums or bags.

The oil will be purchased by "Rolimpex," Mr. S. Jakubowicz, 111 Broadway, Room 316, New York, N. Y. (Telephone: BEekman 3-0453).

Witco Deals Itself In Again

—Continued from page 3

company looks for new customers for its east coast output, it will run into competition from something like 100 million pounds of new capacity going on stream during 1960 alone.

Items:

- Reichhold Chemicals, Inc., is building a 60 million pound unit in Newark, N. J.
- Amoco Chemicals Corporation has just put its Joliet, Ill., unit in operation. Capacity: 15 to 30 million pounds yearly.
- Pittsburgh Coke & Chemical Company is adding 18 million pounds at Neville Island, Pa.
- Koppers Company and Pittsburgh Plate Glass Company plan to add 3 million pounds at their jointly-owned Kobuta, Pa., facility.

Imperial's Karpeles Retires, Served Industry 38 Years

S. L. Karpeles, vice-president of Imperial Color Chemical & Paper Corporation, Glens Falls, N. Y., has retired after thirty-eight years in the chemical pigment color industry.

Starting with Imperial in 1935, Mr. Karpeles was named director of technical sales. In 1948 he advanced to general manager of the pigment color divisions in the company's chemical division. He was also named a director of the company, holding both positions until his retirement.

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Data Offered

Borden Chemical Company has issued a revised 12-page **polymer directory and catalogue.** Copies are available from the company at Department H, 350 Madison Avenue, New York 17. Intended primarily for research and professional use, the catalogue lists properties, end uses, together with other technical data such as percent solids, viscosity, pH, particle size, percent of free monomer, specific gravity and weight per gallon.

Pure Carbonic Company has published a twenty-four-page booklet on **carbon dioxide** and its value to industry. Copies are available from the Air Reduction Company division at 150 East 42nd street, New York 17. The booklet, liberally illustrated, covers the history, principal applications, properties, manufacture, supply and distribution of carbon dioxide in gaseous, liquid and solid forms. Specialized regulating equipment and controls for the materials are also covered, as well as technical sales services available from the company.

Hooker Chemical Corporation has published a thoroughgoing review of four **fluorinated chemical compounds** now being made available on a commercial scale for the first time. "Benzotrifluoride and Its Ortho-, Meta-, and Perchloro Isomers" is the title of Bulletin No. 12-A, available from the company at P. O. Box 344, Niagara Falls, N. Y. Twelve physical properties of these compounds along with thirteen typical chemical reactions are described. Information on toxicity and shipping containers, and an extensive technical reference bibliography are supplied.

S. Blickman, Inc., has issued a new two-page illustrated bulletin describing a newly-designed stainless steel clear-view sloping-front **safety enclosure.** Technical Bulletin A-14 is obtainable from the company without charge at 8400 Gregory avenue, Weehawken, N. J. Suggested uses discussed in the bulletin are (1) a low-intensity dry box for radioactive or poisonous materials, (2) a controlled atmosphere enclosure for safe handling of hazardous materials in chemical or metallurgical work and (3) a microbiological safety enclosure for handling infectious micro-organisms, live viruses, or contaminted animals in medical or biological research.

Antara Chemicals, New York, a sales division of General Aniline & Film Corporation, has issued a new brochure describing three **surface-active agents.** Copies of bulletin "TA-60" are available from the company at 435 Hudson street, New York 14. Covered are uses of the three agents in conjunction with caustic soda in bottle-washing formulations where the bottles are used for milk, beer and soft drinks.

Jefferson Chemical Company has issued a technical bulletin covering its "Hi-Dry" **liquid desiccant.** Copies are available from the company at 1121 Walker avenue, Houston 2. The desiccant covered is a special grade of tetraethylene glycol for use in the removal of water from natural gas. It is said to provide added dew point depression and superior thermal stability properties. The material, Jefferson says, can be used in conventional glycol absorption dehydration plants.

A. C. Horn Companies has issued a six-page catalog covering "Hornbond," a **liquid resinous emulsion bonding agent** for concrete, plaster, stucco, gypsum, cinder block and tile. Copies are available by writing the company at 2133 85th street, North Bergen, N. J. Included in the bulletin is a complete description of "Hornbond," including its color, properties, function, method of application, coverage and tests for vibration, acidity and toxicity together with packaging information and architect's specifications.

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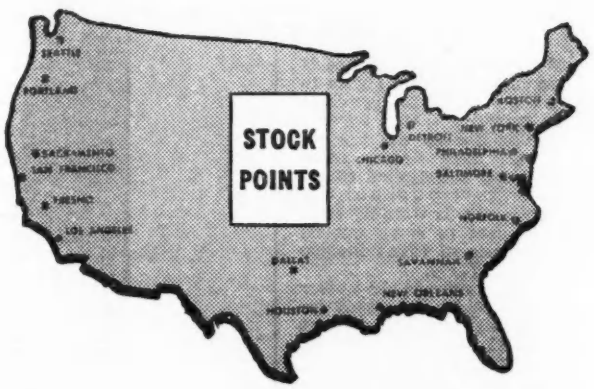

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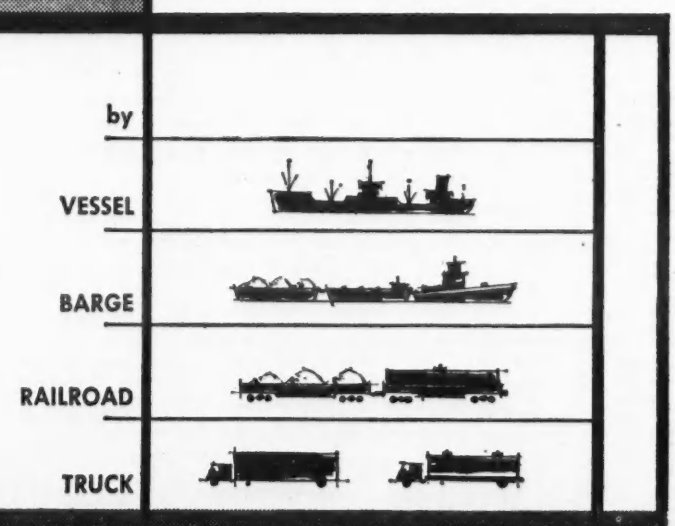

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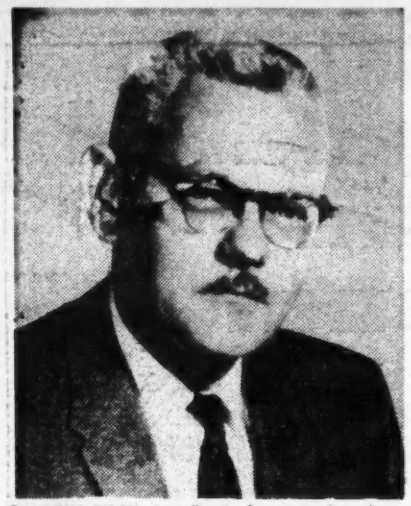

IN NEW POST: Leo Forth, jr., named project manager of the industrial sales division of Sherwin-Williams Company, Cleveland, Ohio. He had been superintendent of technical services at the Los Angeles plant.

Pulp Men Pick Officers, A. B. Doran is Put at Helm

Pulp Chemicals Association elected A. B. Doran president and C. W. Eurenius vice-president at its annual meeting at the Savoy-Hilton hotel in New York last week. Andrew M. Rankin was elected chairman and J. H. Ruskin vice-chairman of the tall oil products division, and G. W. Gilleland was elected chairman and F. J. Eveline vice-chairman of the sulfate turpentine division.

Mr. Doran is general manager of the chemicals products division of Union Bag-Camp Paper Corporation. He succeeds R. J. Spitz as association president. Mr. Eurenius is assistant general manager of the paper makers chemical department at Hercules Powder Company.

CSC Votes to Double Shares

Commercial Solvents Corporation, New York, has voted to double the company's authorized shares of common stock to 6 million at its Baltimore, Md., meeting. At the same time, CSC re-elected Harold W. Comfort, Austin S. Inglehart and Jeremiah Milbank, jr., directors.

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Sodium Metasilicate
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Chemical Firms Find

—Continued from page 5

license on any inventions produced thereunder.

- The committee also added a provision designed to expedite the administration of space research contracts. This provision simplifies the administrator's duties by the acquisition of a royalty-free, irrevocable license unless the administrator determines (1) that he must acquire greater right in the invention because of other federal statues, or (2) the national security or general welfare demands a greater government right.
- The administrator or his designee is permitted to waive government rights to take title where the contract has provided for such rights, provided that a royalty-free, irrevocable license to use the invention is retained. Such license could be employed by either the United States or a foreign government pursuant to treaty. The purpose of this wording is to permit the government to carry out its treaty obligations, some of which involve government-owned property.
- Another provision extends the waiver right to the administrator to cases involving contracts already in existence at the time of enactment of the new provision. It permits such contracts to be amended so as to conform to policies established under the revised law. However, it does not extend to inventions which, under prior procedures, have already become United States property.
- Still another provision is related to the secrecy provisions of the patent code. It permits the administrator to request the Commissioner of Patents to withhold the issuance of patents on certain inventions when national security requires secrecy. It is a provision retained from the present patent clause of the space act.
- The committee also decided to incorporate in its report to the house on the new bill a statement of congressional intent. In part, it urges the administrator to "take from private ownership only so much of the property right in inventions and patents thereon as may be necessary to fulfill the requirements of government and protect the public interest." The statement is intended to serve as a guide to the administrator, indicating circumstances under which title should be obtained by the government.

Bids Wanted

Caustic Soda, 150,000 lbs., Bid No. 4185, April 22, Administracion Nacional de Combustibles, Alcohol y Portland, Montevideo, Uruguay. Bids must be submitted through agent of representative established in Uruguay. Single copy of bid available (in Spanish) from the Trade Development Div., Bureau of Foreign Commerce, Washington 25, D. C.

Drugs, 1,536 bots. Ascorbic Acid tablets, 0.05 gm., ¾ gr., 100S USP (Vitamin C); 600 bots., Ascorbic Acid tablets, USP 0.10 gm., 1½ gr., 1,000S (Vitamin C); 240 bots., Burrow's Solution Tablets, 500S; 304 bots., Calcium Gluconate injection, 1 gm. (15 gr.) 10 cc. 12S USP; 2,400 bots., Codeine Phosphate tablets, 0.03 gm. (½ gm.) 100S USP hypothermic; 6,432 bots., Digitalis tablets, 1 USP unit, 0.1 gm., 1-1½ gr. USP 100S; 720 bots., Ephedrine Sulfate capsules, 0.025 gm. 500S USP. Bid IFB M5-83-60, April 4. Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N. J.

Preservatives and Sealing Compounds, antisize compound, calking compound, cement, coating compound, corrosion preventatives, glazing compound, neets foot oil, putty, water repellant compound, wood preservative, definite quantities, T/C period May 21 thru Feb. 10, 1951. Bid IFB SFW-17586-60, May 10. There is a partial set aside for Small Business. General Services Administration, Region 9, Business Service Center, 49 Fourth St., San Francisco 3, Calif.

Turpentine, 19,200 gals. Spec. Fed. TT-T-801A, Bid IFB 155-2877-60B, April 20, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

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Orlando — Lanfestey Supply Company
Tampa — Lanfestey Supply Company
Tampa — Miller-Lanfestey Supply Co.

GEORGIA
Atlanta — Chemical Services, Inc.

ILLINOIS
Addison — Phillips & Martin Co.
Chicago — Central Solvents & Chemicals Co.

INDIANA
Ft. Wayne — Hoosier Solvents & Chemicals Corp.
Indianapolis — Hoosier Solvents & Chemicals Corp.

IOWA
Des Moines — Miller Chemical Company

KANSAS
Wichita — McKesson & Robbins, Inc.*
Wichita — Universal Motor Oils Co., Inc.

KENTUCKY
Louisville — Dixie Solvents & Chemicals Co.

LOUISIANA
Lafayette — Chemical Services, Inc.
New Orleans — Southern Solvents & Chemicals Corp.

MARYLAND
Baltimore — Leidy Chemicals Corp.

MASSACHUSETTS
Boston — Howe & French, Inc.
Fall River — Borden & Remington Company
Westfield — Eastern Chemicals, Inc.

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MICHIGAN
Detroit — Western Solvents & Chemicals Co.
Grand Rapids — Wolverine Solvents & Chemicals Co.

MINNESOTA
St. Paul — Lyon Chemicals, Inc.

MISSOURI
Joplin — McKesson & Robbins, Inc.* c/o Union Transfer & Storage Co.
Kansas City — McKesson & Robbins, Inc.*
Kansas City — Missouri Solvents & Chemicals Co.
St. Louis — Missouri Solvents & Chemicals Co.
Springfield — McKesson & Robbins, Inc.* c/o General Warehouse Corp.

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Omaha — Miller Chemical Co.

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Lyndhurst, N. J. — Stoney-Mueller, Inc.

NEW MEXICO
Albuquerque — Braun Chemical Co.

NEW YORK
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Johnstown — S. H. Ireland Chemical Co.
New York — Stoney-Mueller, Inc.
Rensselaer — Eastern Chemicals, Inc.
Syracuse — Eastern Chemicals, Inc.

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Durham — Cardinal Products, Inc.

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Cincinnati — Amsco Solvents & Chemicals Co.
Cleveland — Ohio Solvents & Chemicals Co.
Toledo — Toledo Solvents & Chemicals Co.

OKLAHOMA
Oklahoma City — Ward Chemical & Supply Co.
Tulsa — Ward Chemical & Supply Co.

OREGON
Portland — Van Waters & Rogers, Inc.

PENNSYLVANIA
Pittsburgh — Vitro Manufacturing Co.

RHODE ISLAND
Providence — Borden & Remington Co.

TENNESSEE
Memphis — Chapman Chemical Co.

TEXAS
Dallas — Texas Solvents & Chemicals Co.
Dallas — Van Waters & Rogers, Inc.
El Paso — Braun Chemical Co.
Houston — Texas Solvents & Chemicals Co.
Houston — Van Waters & Rogers, Inc.

UTAH
Salt Lake City — Braun-Knecht-Heimann Co.
Salt Lake City — Wasatch Chemical Co.

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La Crosse — Wisconsin Solvents & Chemicals Corp.
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Chemstrand Has O'seas Unit; Hadden Given VP Role in It

Major organizational changes, including the formation of a foreign operations division, are under way at Chemstrand Corporation.

Hamilton Hadden, Jr., has been named vice-president and general manager of the foreign operations division. This division will be responsible for supervision of the corporation's investments in operations abroad, and sales of domestically produced goods in markets outside the US.

DuPont Antifreeze

—Continued from page 3

of major cooling system breakdown before costly damage has been done.

Secret of the product's unusual staying power, duPont adds, is a new long-life chemical inhibitor that rustproofs the entire cooling system and protects all metal surfaces.

"Telar" will be available at gas stations starting in June at $5 a gallon.

Dow Chemical's "Dowgard," which made its debut earlier this year (OPD, 1/11/60), can be used in summer and winter, according to the company, but needs to be replaced once a year.

IN WORLD POST: John van der Dys, named manager of the international division of Century Chemical Corporation, New York. He had previously been with the international department of Olin Mathieson Chemical Corporation.

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Philadelphia — Pioneer Salt Co.
Pittsburgh — Western Penna. Chemical Co., Inc.
Reading — Textile Chemical Co., Inc.

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Providence — Borden & Remington Co.
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TEXAS
Dallas — Texas Solvents & Chemicals Co.
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Carbide's Visking Names Medici, Pitzer to Top Posts

Howard R. Medici has been appointed chairman and Glenn L. Pitzer president of Visking Company, a division of Union Carbide Corporation, New York.

Mr. Medici became associated with Carbide in 1957 when Visking joined the corporation. He had been with Visking since 1929 and was a key man in the company's development. He was an officer of the company since 1933 and was made president in 1955.

Mr. Pitzer joined Carbide in 1933 at the South Charleston, W. Va., laboratory of Union Carbide Chemicals Company.

Hexachlorobenzene Plant Completed by Firm in N. J.

Standard Chlorine Chemical Company, South Kearney, N.J., has just completed construction of a new plant of novel design and is now producing hexachlorobenzene which is reportedly of heretofore unequaled quality.

The new plant is said to utilize new production methods and techniques, developed over a period of several years by the company's research staff. Capacity is estimated at more than 2 million pounds per year.

Potash Prices Set for Boosts

—Continued from page 4

ical industry, net cash thirty days. Prices of the three products in bulk per unit of K_2O will be as follows:

Standard muriate "Higran" (62/63 percent K_2O), July-August, 33 cents per unit; September-October, 34 cents; November-December, 35 cents; January-June, 1961, 37½ cents.

Coarse muriate "Hygran" (62/63 percent K_2O) or granular muriate (60 percent K_2O), July-August, 34 cents per unit; September-October, 35 cents; November-December, 36 cents; January-June, 1961, 38½ cents. Bag prices for all grades are $5 per ton higher.

A company spokesman points out that potash prices in the US and throughout the world have been depressed for the past few years, and the announced increase will just about restore them to the levels of 1956.

"Higher costs for labor and materials, together with the need for capital expenditures to meet the increasing demand for potash, particularly in the coarser forms, made this price increase necessary," he states.

Drug Men to Get Blasting

—Continued from page 3

Medical College, Albany, N. Y.; Dr. David Novick, Rand Corporation, Santa Monica, Calif.

This is the fourth in the series of hearings to be held in the drug field by the committee.

"In the hearings that have been held so far," Chairman Estes Kefauver said, "the subcommittee has received a great deal of pertinent testimony from varied sources.

"The witnesses who have been called during the coming week will be able to testify from the vantage point of their firsthand knowledge of problems in the industry as physicians and pharmacologists.'

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P. A.'s See Business 'Good,' 'Disappointing'

—Continued from page 5

in commodity prices. In general, where price changes have occurred, they have been relatively minor in nature. Increases on some specific items have been offset by decreases on others. There are many evidences that competition is keen; and, price competition is developing on a number of items where it has not been available for years. On an over-all basis, 70 percent of our members say there has been no price change in the last 30 days; 23 percent say there has been a slight upward movement, and 7 percent say the trend is down.

Inventories

It is now quite clear that purchasing executives do not plan any inventory build-up at the present time. Since the steel strike, they have been able to replenish depleted items. The ready availability of almost all materials, coupled with the belief that prices will not rise much in the immediate period ahead, eliminates any incentive for inventory accumulation. As a result, 53 percent of our members report no change in their inventory situation, while 29 percent tell of minor additions, and 18 percent of slight reductions.

Employment

Adjustments in the work force are reflected this month as some of the zip disappears from the earlier enthusiasm for a first-quarter boom. While there are no reports of extensive layoffs, the number reporting reductions of people on their payrolls rose to 22 percent this month. Also, only 14 percent indicated any increase in their employment (this compares with 24 percent last month). The majority, 64 percent, still say that their employment is being maintained at previous levels. The severity of the weather during March is blamed by many for the employment decline. Some industries were immobilized for prolonged periods of time. Construction was at a standstill in many northern communities, necessitating layoffs of substantial numbers of building trade workers.

Buying Policy

The trend toward shortening the time ahead for which purchasing executives are willing to commit, continues. There is an unmistakable desire to hold forward commitments to the minimum necessary to meet current production schedules. This is not at all surprising, however, when balanced against the ready availability of all the items needed. It is just good buying policy.

	PER CENT REPORTING				
	Hand to Mouth	31 to 59 Days	60 to 89 Days	90 Days to 6 Mos. 1 Yr.	
March					
Production materials	8	36	28	22	6
MRO supplies	26	44	23	5	2
Capital expenditures	9	8	14	23	46
February					
Production materials	6	30	32	25	7
MRO supplies	22	43	20	13	2
Capital expenditures	11	5	13	21	50

Specific Commodity Changes

For the first time in many months, buyers are readily finding everything they need. There are a few reports of local shortages of some items, but in no instance are there enough to be statistically significant. Of items reported up in price, only the chemicals had more than token support.

On the up side are: Hand tools, vegetable oils, rubber, phthalic anhydride, phthalate plasticizers, calcium chloride, chlorine, lime, rosin, dyestuffs, multiwall bags, kraft paper, and drills and taps.

On the down side are: Custom smelter copper, steel scrap, fuel oil, some paper products, certain items of electrical equipment and cobalt oxide.

In short supply: Nothing.

Dixon Is Booming

—Continued from page 5

dustries, Inc., an affiliate, has made plans to construct a hydrofluoric acid plant that will use approximately 30,000 tons of sulfuric annually.

"Ultimately," says Arthur W. Dixon, jr., the firm's president, "we plan to diversify still further in such related fields as drugs and organic chemicals." Specifics were not disclosed.

Sales in 1959, the company reports, scored a whopping 46 percent advance to $3,951,844 from $2,707,345 in 1958. Earnings were $302,857 as against a loss of $197,602 the previous year. Profits equalled 60 cents per share, based on average number of shares outstanding during the year and with $105,000 set aside for future federal income tax.

"At year's end," Dixon is telling its stockholders, "your company had taken its place beside the major corporations in the basic chemical field and emerged as a prime supplier of sulfuric acid, one of industry's essential ingredients."

In reviewing highlights of 1959, the report notes that the company for the first time appeared on the board of the American Stock Exchange (under the symbol DIX), and that the Dixon Chemical Industries affiliate opened a 300,000-ton sulfuric acid plant at the Paulsboro site.

Polyethylene Business

—Continued from page 7

packagers a first sniff at four of its scented polyethylene films: chocolate, orange, clean linen and perfume.

All the resins smelled were made at the company's polymer service laboratory in Tuscola, Ill., by mixing scented resin with a standard film grade "Petrothene" polyethylene resin for extrusion by the blown film process.

Another highlight of the USI display in Atlantic City was provided by "Petrothene 101," a new polyethylene molding resin designed for blow molding and injection molding.

With a density of .924, says USI, this material is characterized by high stiffness, good stress crack resistance, excellent appearance and easy processability. Recommended applications are detergent bottles and other containers requiring rigidity.

"Petrothene 112," also introduced at the exposition, is said to have toughness, high clarity and high gloss. It can be processed by the blown, flat or cast film making methods, packagers were told.

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Agricultural Chemicals

Unfavorable planting weather has held up fertilizer shipments throughout much of the eastern half of the country. Following heavy, late winter snows, melted too quickly by an untimely rise in the temperature, the several days of rain have caused damaging floods in the Midwest, and, elsewhere, simply prevented farmers from getting crops started. Without seeming overly pessimistic, trade people admit concern about sales not only this spring but also for the 1959-60 year as a whole. Last fall, movement of fertilizer materials was good but excessive rain prevented usual applications. Consequently, dealers and mixers started out this spring with larger than normal inventories, meaning their requirements for the remainder of the season may be lessened if the weather doesn't break soon.

Passage of significant farm legislation this session of congress is doubtful. Speculation is that the law makers will act on civil rights before Easter, and, time permitting, consider the Boggs bill and an agricultural research bill before recessing in July prior to the political conventions.

The Boggs bill, providing tax relief on income earned abroad by US firms, only indirectly effects agricultural chemical producers. Considerably more important to the trade in the long run are the two research bills, S 690 and HR 8629, both of which appear to be tied up in legislative maneuverings.

The Senate and House bills are similar, providing that an agency be set up within the Department of Agriculture to expand research on new uses for agricultural products. Originally, some of the senators had pressured for an independent government agency but this, understandably, did not meet with the approval of USDA chief Ezra Taft Benson.

The Agriculture department has, of course, been doing considerable research on utilization of farm products. It's felt, however, that an agency specifically provided for by the congress would give impetus to this work, so necessary if the US is to find solutions to the problem of farm surpluses.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
110.72	110.72	110.20	112.61

For Current Prices See Page 11

Animal and Plant Foods

Ammonium Sulfate—February production of byproduct ammonium sulfate was 133,126,839 pounds (approximately 66,563 short tons), down 3.4 percent from January's 137,830,215 pounds. February 1959 output was 127,635,430 pounds, the Mines bureau says.

Up 11.5 percent, February sales were 95,204,423 pounds (approximately 47,662 short tons) compared with 85,368,060 pounds the month previous.

Stocks at February's end totaled 287,652,804 pounds (approximately 143,826 short tons), 15.1 percent higher than those held thirty days earlier (249,827,790 pounds), but almost on a par with stocks held the same date in 1959 (287,219,340 pounds).

Animal Proteins—Dried blood and tankage prices were unchanged last week at $5.50 and $5.25-$5.75, respectively. Formula feed requirements coupled with the seasonal pick-up in interest from fertilizer mixers is thought to account for the stability of the market.

Fishmeal and fishscrap prices continued at $101 and $105 per tons, respectively, levels established by a $5 per ton advance late in March. Demand is said to be considerably improved.

Commercial Fertilizer—Consumption of commercial fertilizer by non-farm households in the Middle Atlantic States for the year ended June 30, 1959, appears to have been about 219,000 tons. As a result, the mean fertilizer consumption per non-farm household in the region is estimated to have been approximately 39.1 pounds.

These figures are based on a sample survey of 1,873 homes scattered throughout the area. Reported by the National Plant Food Institute, the data were collected by personal interviews and later adjusted to the extent necessary for imperfect sampling.

Total retail value of the fertilizer used by non-farm homes in the area surveyed (New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, and West Virginia) was approximately $20,872,000, of which mixed fertilizer accounted for $14,790,000. As was the case in a previous study of New England, fertilizer use on lawns accounted for well over half of total consumption.

Lime—January sales of lime were 973,659 tons, compared with 1,001,314 tons in December, the all-time high, and 702,533 tons in January, 1959. Of the total, 777,189 tons were quicklime, the remainder—196,470 tons—hydrated lime. Chemical and other industrial usage increased, whereas decreases were noted in agricultural, refractory, and construction lime.

According to the Bureau of Mines report, 6,368 tons of lime were used agriculturally in January. This compared with 10,235 tons in December and 7,205 tons in January, 1959.

Of the 6,368 tons, 4,170 tons were hydrated lime and the remainder—2,198 tons—was quicklime.

Pesticides

Reports from pesticide formulators in the East indicate that shipments were delayed several weeks this year by the weather. Since late March, however, demand has been steadily increasing, particularly for granular material intended for use on turf. Chlorodane, a highly-rated below ground insecticide, was also reported to be in good demand.

Fruit insecticides, such as lead arsenate and malathion, are beginning to move but it'll be several weeks before deliveries approach what the trade calls volume.

Incidentally, one usually well-informed trade member notes that malathion seems to be moving in on markets vacated by heptachlor. The latter pesticide, which did very well last season saleswise, was recently banned by the Food & Drug Administration.

Eating crow is what some people down in Washington are doing—those, that is, who scared the nation half-to-death last fall with reports that cranberries could be dangerous for human consumption. The story told was that some of the cranberry crop had been treated with aminotriazole, a pesticide alleged to be a carcinogen.

Now, with the scare over, the government has decided to pay damages to the cranberry growers to the tune of $10 million. This will allow the growers approximately $8 a barrel compared with $12 they would probably have received on the normal market.

Superphosphate & Other Phosphatic Fertilizer Production

Following are data compiled by the Bureau of Census indicating superphosphates and other phosphatic fertilizer produced and shipped in the United States, July, 1959, through January, 1960. Included are percentage changes. All material is 100 percent P_2O_5 in short tons.

Grade	1960 Season In shorts tons 100 percent P_2O_5		1960 Season Percentage change from 1959	
	Production	Shipments	Production	Shipments
Normal and enriched	751,584	359,025	+ 6	— 2
Concentrated	518,109	444,153	+11	+ 8
Other phosphatic fertilizers	196,696	174,049	+20	+22
Total	1,466,389	977,217	+ 9	+ 6

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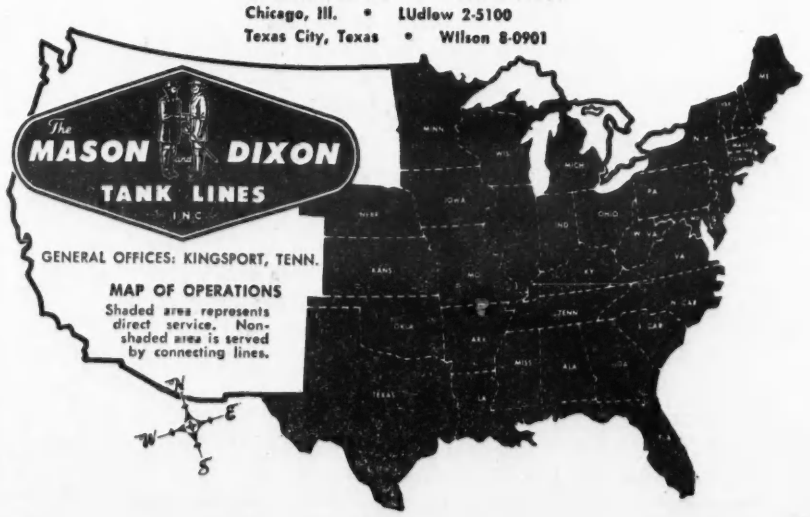
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Trade Name Chemicals & Specialties

The end use pattern for optical brighteners shows detergents at the top with paper the next major outlet. By 1965 it is estimated that use of brighteners in paper will draw even with detergents. In the detergent industry there are three major growth factors with regard to optical bleaches. Detergent manufacturers are using higher concentrations of brighteners today in their formulations. Then too, there is a greater range of agents as laboratories are constantly working on new products so that every fiber, whether natural or synthetic can be brighter. And finally, there is the ever present population increase. Still-and-all, paper is said to hold the most promise for brightening agents.

By the end of the year uses of optical bleaches in paper will probably jump 25 percent and by 1965 will be 40 percent of the total brightener market. The big hope is that leaders in the paper industry will incorporate brighteners into more of their products. Fields expected to consume the most are fine papers, boxboard, packaging and coated grades of paper.

Dyestuff & Chemical Division of General Aniline & Film Corporation has announced the development of two new ultraviolet absorbers — **"Uvinul N-35"** and **"Uvinul N-38."** These are the first of a new family of UV absorbers which are chemically identified as substituted acrylonitriles.

According to General Aniline, unlike other UV absorbers on the market, these two **"Uvinuls"** do not contain acidic aromatic hydroxyl groups and they show excellent UV absorption properties under varying pH conditions. The absence of these acidic groups, continues the company, suggests uses of the new compounds in systems which would be adversely affected by their presence.

"Uvinul N-35 and N-38" are said to be suitable for protecting nitrocellulose lacquers against UV degradation without adding undesirable color to the coating. Also, General Aniline recommends them as being of value in other systems such as butadiene-styrene latex, melamine-formaldehyde, urea-formaldehyde, epoxy-amine and nylon formulations.

Optical Brighteners

"Safaritone White WNOA" is an optical brightener developed by Hilton-Davis Chemical, division of Sterling Drug, Inc., for convenient and economical application to textiles. The company says that their product is of special interest because neither acid nor alcohol is necessary for solubilization. Also, it is said to exhibit good affinity for and level dyeing characteristics on wool, nylon, orlon, and acetate.

In addition, Hilton-Davis reports that acid is not needed to dissolve or exhaust **"Safaritone White WNOA"**; it eliminates the necessity for separate dyebaths and neutralizing operation required for acid dissolved whiteners; and it can be applied in normal wet finishing processes.

Regarding safety properties, the company says that since **"Safaritone White WNOA"** is soluble in warm water, it eliminates use hazards of products dissolved by acids or inflammable solvents. Further, it is convenient to handle in drug room or subsequent dyeing operations.

Concerning compatability of the brightener, Hilton-Davis continues by saying that it can be used in conjunction with cellulose substantive brighteners, such as **"Safaritone White C,"** for whitening such blends as cotton/wool, viscose/acetate, and viscose/orlon in a single rinse or soaping bath.

Finally, discussing application factors, the company states that **"Safaritone White WNOA"** can be applied at low temperature to fine fabrics from soap or rinse operations without interfering pH adjustments. To a weighed sample of brightener add a small portion of water and slurry followed by the remaining water. Although the solution is cloudy at this point, when diluted with the dye bath it will be clear.

"Fiberwhite G-120" is an optical brightener put out by Fiber Chemical Corporation for use in the paper industry. It can be applied wherever whiteness is at a premium as in the case of bond or book paper, tissue- coated board, etc. Explaining how **"Fiberwhite G-120"** can be used, Fiber Chemical says that each mill can easily determine by tests how much brightener is needed to obtain desired effect.

More specifically, discussing surface application, the company states that **"Fiberwhite G-120"** has good water solubility and can be surface applied to sheet paper. Also, it supposedly can be applied at the calander stack or at the size press, in water solution, in the starch size solution, or in other surface sizing solutions used in a mill.

Also used in the beater, Fiber Chemical advises that more brightener will be required as compared to surface application, with one to three pounds per ton of stock producing good effects.

With regard to application to coatings, **"Fiberwhite G-120"** is suggested for use in tinting clay coatings, clay-starch coatings and clay-casein coatings. This brightener is said to compensate for yellowish tints. To start with, the company recommends addition of 1½ to 2 ounces per 100 pounds of clay.

Fiber Chemical also acclaims **"Fiberwhite G-120"** as being effective for use in commercial laundries. Features claimed to make it desirable include more brilliant whites, reduction of the amount of chlorine bleach, longer fabric life, and less blueing needed.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Sizing Agents

Two sizing agents produced by Nopco Chemical Company are **"Nopco-size D-10"** and **"Nopcolube 55."** The first one, **"Nopcosize D-10,"** is a water soluble, synthetic polymer type size formulated for Dacron warp yarns. **"Nopcolube 55"** is an emulsifiable lubricant which is designed for use with **"Nopcosize D-10"** to eliminate overwaxing.

Concerning physical and chemical properties of **"Nopcosize D-10,"** Nopco says that it is a milky, translucent solution with a viscous consistency, it is 10.0 percent solids, has a pH in a 2 percent solution of 9.2 plus or minus 0/2, and its density is 8.4 pounds per gallon.

Discussing the properties of **"Nopcolube 55,"** Nopco reports that it is a cream colored liquid likewise of viscous consistency, with a 47.0 percent solids content, pH in a 2 percent solution of from 6.5 to 7.0, and a density of 7.0 pounds per gallon.

Advantages derived from using either of these two sizing agents as listed by Nopco include elimination of shedding and flaking during weaving, elimination of overwaxing, cleaner goods, and superior split obtained on warp sized with this combination permits higher slashing speeds. Further, Nopco claims that **"Nopcosize D-10"** and **"Nopcolube 55"** are easily prepared and readily scoured, and finally do not require stainless steel equipment.

"Seyco SC" is a warp size put out by Seydel-Woolley & Company. A tan paste, the company says that their product is emulsifiable in hot starch solutions of viscosity equal to or exceeding 7 ounces unmodified pearl corn starch, or 9 ounces of 40° F. corn starch per US gallon. This is a concentrated compound containing 80 percent fats, lubricants and waxes, the remainder being hygroscopic salts, preserva-

—Continued on page 79

Aliphatic Organics

Trade observers say preliminary reports show March sales improved over the first two months of the year and may have exceeded projections in some areas. January and February were somewhat below forecast, but still ahead of last year. For the first quarter the overall market has maintained "a fairly decent industrial balance and there are no glaring weak spots." By and large, producers have continued to adhere to a hold the line policy as far as prices are concerned. Recent price action in this market includes the 12 cents per pound across the board reduction in hydroxyethyl cellulose reported two weeks ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
132.19	132.34	132.34	130.60

For Current Prices See Page 11

The improvement in synthetic resin sales last month has been reflected in polyhydric alcohols. Glycerine sales in the first quarter have kept pace with last year, sources report. Pentaerythritol and sorbitol have developed strength over the past month. Warmer weather and an upturn in paint sales have helped.

The American Soap and Glycerine Producers' Association reported total production of glycerine substitutes during January of this year amounted to 133.6 million pounds Ethylene glycol output was 114.3 million pounds, propylene glycol production was 13.5 million and pentaerythritol was 5.7 million pounds.

Possible new application for methanol was reported at a national meeting of the American Chemical Society in Cleveland, Ohio. In radiation-induced graft polymerization, chemists have found that addition of methanol permits speedier attachment of styrene to polyethylene. This may be the key to a broad new field of plastics modifications, it is said. Before the new field of application comes into being, however, further experimentation will be necessary to determine whether the accelerative effect of methanol is generally applicable to other monomer-polymer systems.

Acetic Acid—Textile demand improved somewhat last month. A steady improvement in this outlet is expected during the second quarter as the mills will be turning out their spring lines.

Last price action in the acetic acid market was a 5c. per pound boost in prices on packages. Drum and bulk quantities have been unaffected by the change.

Acrylonitrile—Sources have noted improvement in demand from textile outlets in recent weeks. However, the upturn has not been as sharp as had been anticipated. Fully adequate industry capacity assures consumers of adequate stocks. Price is unchanged and steady at previously reported levels.

Tariff Commission report placed acrylonitrile output at 23.2 million pounds during January, a gain of 2.2 million pounds over the previous month. Production total for 1959 was 232.2 million pounds.

Butadiene—Synthetic rubber production has been running at a well sustained high level. Sources report that some rubber companies having their own captive supply of butadiene have continued to augment stocks with outside purchases thus providing better tone in the overall market. Merchant producers of butadiene operated, in some cases, at better than 90 percent last year, it is said.

Butanol—Prices were unchanged and steady at previously reported levels. tert-butanol advanced 1c. per pound April 1. n-Butanol was raised ½c. per pound at the first of the year. Prices of sec-butanol have not advanced. Tankcar quantities of n-butanol list at 15½c. per pound; tert-butanol, 13½c. per pound and sec-butanol, 12½c. per pound.

Chlorinated Solvents—The market is essentially unchanged from previous reports. East coast market remains highly competitive, especially for trichloroethylene. Demand for perchloroethylene in the dry cleaning outlet has been improving. Observers look forward to a post-Easter buying flurry in the latter market. Inventories are in good shape to handle any added business, sources say. On methylene chloride, an upturn in paint sales should bolster the market. Industry estimates indicate that 35 percent to 40 percent of methylene chloride produced goes to paint removers.

Dextrose—Last previous change in this market was a 15c. reduction of last month along with the decline in the sucrose market. Price is set at $7.45 a hundred pounds in carload quantities for hydrated material. Anhydrous dextrose, same quantity, is $1.20 per hundred pounds more.

Epichlorohydrin — Epoxy resins outlet continues quite strong, according to most reports. Price of epichlorohydrin, which dropped 6c. per pound last year, has steadied out at 27c. per pound. In addition, the quotation is on a delivered basis. Sources point out that a low cost raw material is no small matter when it comes to developing new markets or extending existing markets.

Ethanol — Market is unchanged from previous report. Stocks are fully adequate for trade requirements. No further developments have been reported in the government's proposal to make 30 million bushels of corn surplus available for alcohol production. Trade resistance to the move has been strong.

Ethylene—Heavy demand for polyethylene has tightened the supply situation in this market. Price is firm and unchanged at levels of long standing. Opinion is divided as to the strength of the polyethylene outlet. Some sources say there are signs that demand is slowing down. Other reports point out that plants have been running at close to capacity and expect to continue doing so.

Requirements for polyethylene in the packaging field are expected to continue a rapid growth trend. Use in production of detergent containers, a relatively new outlet, could provide a market for 40-50 million pounds of high density polyethylene, according to estimate of industry spokesmen. Capacity for the production of polyethylene film is about 450 million pounds. Consumption last year was 330 million with about 250 million pounds going into the packaging field.

Ethylene Glycol — January production was 114.3 million pounds, a gain of about 9 million pounds, according to Tariff Commission. Currently, industrial demand has been quite active. Bulk of the market goes to antifreeze solution which is seasonally slow. Price remains unchanged and steady at 13½c. per pound, tankcars, delivered East.

Propylene Glycol—Listing remains unchanged from last report. Price on tankcar and carload quantities declined 1c. per pound in late December, 1959. Less carload price was dropped ¾c. per pound at that time.

Tariff Commission report for January indicated production of propylene glycol during the month amounted to 13.5 million pounds as against 14.9 million in the previous month and 9 million pounds in the comparable month last year. Output in the final quarter of 1959 ran to 56.5 million pounds.

Sorbitol—This material is one of a number of polyols to benefit from an upturn in synthetic resin sales last month, sources report. Price of resin grade material has remained steady and unchanged. USP grade was advanced 1¼c. per pound in tankcars and 2c. per pound in carload and less carload drum lots in November, 1959.

Taking into consideration seasonal fluctuations, pharmaceutical applications have been holding up very well. The USP material commonly finds use as a vehicle in pharmaceutical elixer and syrup preparations.

Sucrose—Market is maintained unchanged from previous report. The last change to take place in this market was a 15c. reduction effected last month which set the price on refined white sucrose at $9.20 per hundred pounds. Market has steadied out somewhat, but has thus far failed to gain much strength.

Trimethylol Propane—Sources noted an

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Aliphatic Organics

improvement in trimethylol propane. Material finds specialty resins use in the production of polyurethane foams. Prices are unchanged from last report.

Vinyls—High production levels in the auto industry during the first quarter helped boost sales of vinyl coatings and industrial textile fabrics.

However, new car sales have not come up to expectations. Inventories of unsold new cars in dealers' hands are estimated at a million units and cutbacks in auto production have been taking place during the past month.

As a result, it is expected that demand for vinyl coated auto fabrics, largest industrial textiles outlet, will level off during the next few months as auto companies attempt to pare their inventories of new equipment.

Vinyl acetate monomer did not reflect the ½c. per pound rise in polyvinyl acetate emulsions which producers put through on April 1.

Formaldehyde—Preliminary reports indicate that March was a very good month for sellers of formaldehyde. Resins volume hit an uptrend after the subdued tone of January-February. The latter months were good, but not what optimistic forecasts at the first of the year said they would be. Pricewise, producers have continued to adhere to a hold the line policy.

Glycerine—An upturn in paint sales, with warmer weather, is expected to bolster the alkyd resins outlet. Glycerine sales to the alkyds market during March improved in comparison with the first two months of the year, sources say.

The large disappearance of glycerine reported in January (27.3 million pounds) is felt to be somewhat of an overstatement as reporting may have gotten out of phase with actual utilization. Figures will probably average out over the quarter, sources say. Best score racked up last year was in the heavy-consuming month of September when the Association of American Soap and Glycerine producers reported disappearance of 24.2 million pounds of glycerine.

Preliminary figures indicate February production of crude glycerine amounted to 25 million pounds, while refined was 24.2 million. Factory and warehouse stocks at the close of the month amounted to 16.9 million pounds of crude and 40.2 million pounds of refined.

Hydroxyethyl Cellulose—Price declined 12c. per pound across the board as reported two weeks ago.

New schedules list hydroxyethyl cellulose at 84c. per pound in 20,000 pound lots or more, 89c. per pound for 2,000 to 19,999 pound quantities, 93c. for 100 to 1,999 pound lots and $1.03 per pound for less than 100 pound lots. The schedule applies to all grades, whereas high viscosity material previously held a 5c. per pound differential over low viscosity.

Molasses—Producers of yeast, citric acid and vinegar continued to be the second largest users of molasses last year, according to report of the Department of Agriculture. These consumers took an estimated 71 million gallons in 1959, or a million gallons more than in the previous year. Molasses used in the production of edible molasses and sirups totaled 15 million gallons, about the same as in 1958.

Although molasses used in the production of alcohol and other distilled spirits averaged about 4.3 million gallons per month in the first part of 1959, it dropped to 1.5 million gallons per month in the final half of the year. Molasses used in the manufacture of distilled spirits, chiefly rum and gin, during the first half of 1959 was at the same rate as a year earlier.

Of the total 546 million gallons of molasses used in 1959, about 78 percent went for livestock feed.

Pentaerythritol — Market was fairly strong last month. An improved outlook for paint sales during the second quarter promises to benefit this market. Price is steady; supplies, adequate.

Development of continually better alkyds utilizing pentaerythritol has boosted this polyol's share in the alkyds market. Sources point out that comparative tests for chemical resistance and other properties show that pentaerythritol-glycol type alkyds give performance comparable to glycerol types.

Farm Chemicals Cutoff

—*Continued from page 7*

extension was published last month (OPD, 3/14). The additional list follows:

Calcium carbide to produce acetylene, on pineapples to induce flowering.
Calcium cyanamide, on cotton to defoliate.
p-Chlorophenoxy acetic acid, on bean seeds in sprout production, to eliminate embryonic root development. On tomato blossoms to enhance fruit set.
2,4-Dichlorophenoxy acetic acid, on potatoes to intensify color.
Ethylene, on pineapples to induce flowering. On citrus fruit to bring out color. On bananas and pineapples to hasten ripening.
Isopropyl N-(3-chlorophenyl) carbamate, on potatoes to inhibit sprouting.
Isopropyl ester of 2,4-dichlorophenoxy acetic acid, on potatoes for better skin set and to enhance color.
Methyl ester of naphthalene acetic acid, on potatoes to inhibit sprouting.
Naphthalene acetamide, on apples, pears, and prunes to thin fruit. On apples and pears to control fruit drop.
Naphthalene acetic acid, blossom spray for thinning fruit.
Sodium salt of a-naphthalene acetic acid, on pineapples to induce flowering. On fruit to reduce fruit set and to control fruit drop.
Sodium salt of B-naphthoxy acetic acid, on pineapples to delay maturation.
2,3,5,6-Tetrachloronitrobenzene, on potatoes to inhibit sprouting.
Tributyl phosphorotrithioite, on cotton as defoliant.
2,4,5-Trichlorophenoxy acetic acid, to thin fruit and control fruit drop.
2,4,5-Trichlorophenoxy propionic acid or its triethanolamine salt, blossom spray for thinning fruit and on fruits to prevent premature harvest drop.

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Rayon Sales Leak Set for Butadiene Patch

—Continued from page 3

Rayon, will become chairman of the board of directors and John D. Fennebresque, president of Houston-based Texas Butadiene will become president and chief executive officer of the combined company.

Mr. Kline has been president of Industrial Rayon since 1949 and has served as an officer of the company since 1929. Mr. Fennebresque joined Texas Butadiene as president in 1958.

Prior to becoming president of Texas Butadiene, Mr. Fennebresque was executive vice-president, a director and member of the executive committee of Food Machinery & Chemical Corporation. He also was president of two of the company's foreign subsidiaries.

He was associated with Celanese Corporation of America in various executive capacities from 1944 to 1955. He was elected a vice-president of Celanese in 1951 at the age of thirty-four, was named assistant to the president in 1952 and was a member of the company's board of directors and executive committee.

Principal products of Industrial Rayon include "Tyrex" tire cord, rayon textile yarns, rayon and rayon blend knit fabrics, polypropylene fibers, and nylon staple and bulk filament yarns for sale primarily to carpet manufacturers.

Texas Butadiene produces aviation gasoline, butadiene and other petrochemical products at its plant in Channelview, Tex. An expansion program for butadiene, which is used in the manufacture of synthetic rubber, will be completed by the fourth quarter of this year and will raise the plant's annual capacity from 90,000 tons to about 120,000 tons.

Texas Butadiene has a 20 percent interest in a synthetic rubber plant under construction near Marseilles, France. It is currently engaged in negotiations with the government of Argentine regarding the construction of synthetic rubber and butadiene facilities in that country.

M. A. Hanna Company owns approximately 20 percent of the shares of Industrial Rayon. Principle stockholders of Texas Butadiene are Godfrey L. Cabot, Inc., and associates of Carl M. Loeb, Rhoades & Co., Inc. A two-thirds vote of the outstanding stocks of each company is required for approval of the merger.

Obituaries

Abraham Bakst

Abraham Bakst, founder of Purity Drug Company and an executive of Vitarine Corporation, New York, died April 3 in that city.

After founding Purity, Mr. Bakst moved to Vitarine where he served ten years until his retirement in 1958. For more than twenty-five years he was an executive member of the drug section of the New York Board of Trade.

Gordon O. Cragwall

Gordon O. Cragwall, former director of technical service for Chas. Pfizer, Brooklyn, N. Y., died March 28 in Garden, City, N. Y.

Before joining Pfizer in 1929, Mr. Cragwall had been associated with E. I. duPont de Nemours & Co. since 1915 as a research chemist, assistant chief chemist and in other supervisory capacities.

He was one of the founders of Commercial Chemical Development Association and secretary of the organization for several years.

Paul C. Ausley, of Potash Company of America, Washington, D. C., died March 31.

Wilhelm L. Bruhn, president of Valspar Corporation, died March 16 in Philadelphia. He was fifty-nine years old.

Charles Dunlap, analytical chemist with E. I. duPont de Nemours & Co. since 1929, died April 3 in Clark, N. J. He was fifty-four years old.

John Schlintz, former account executive with Sherwin-Williams Company and since 1958 a consultant with the firm, died March 31 in Orange, N. J. He was sixty-seven years old.

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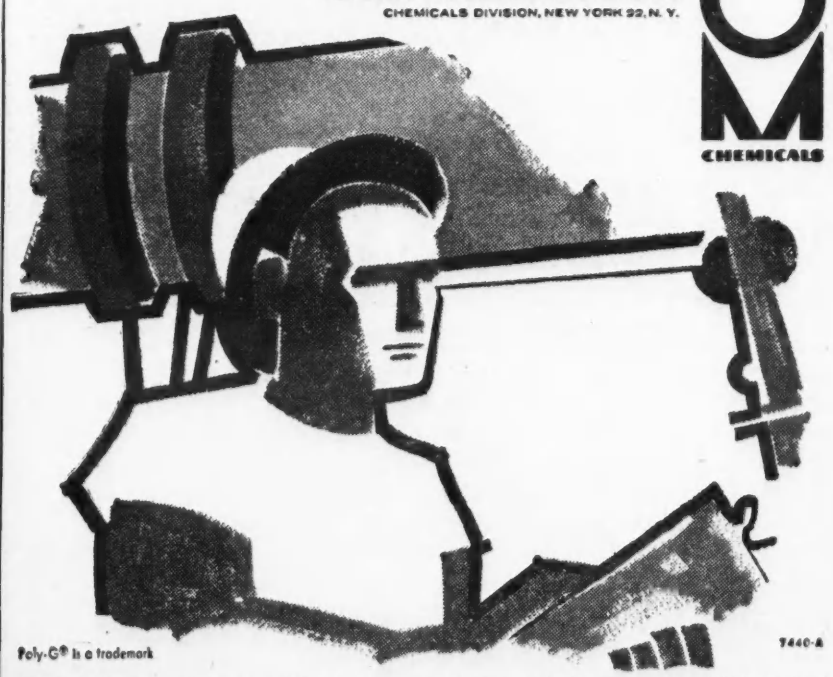

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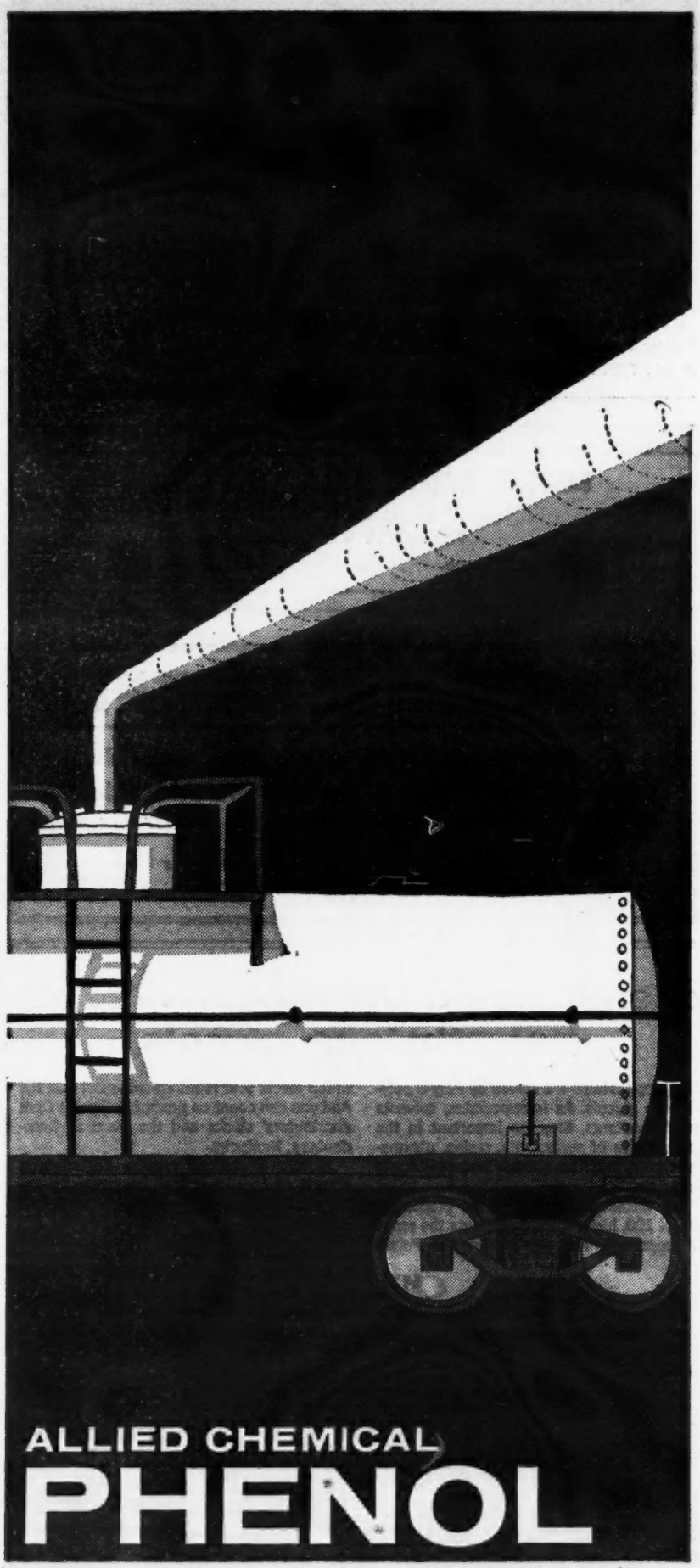

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The shortage of benzene is being prolonged beyond what trade sources had anticipated. Sustained high level production of styrene monomer and phenol, a strong export demand and peak seasonal demand from makers of insecticides such as DDT and BHC have all combined to extend the shortage. Naphthalene is another key coal chemical in short supply. Here, the prospect for the balance of the year is bleak. Brokers are more likely to want to buy naphthalene than sell it, sources say. Pyridine is sold out until late summer at least, according to reports.

Phthalic anhydride is slated to remain unsettled as a result of the spread in producers' prices and the setting aside of proposed increases in plasticizers until July 1. Another month of allocations for phthalic and maleic anhydrides is in prospect.

Additional o-xylene capacity is expected in June from a petrochemical source. Earlier in the year, a second petrochemicals maker announced a sizable expansion in o-xylene capacity. Export demand for o-xylene is slated to remain strong in the years immediately ahead.

American Iron and Steel Institute estimates that world-wide spending for modernization and expansion in the iron and steel industry will amount to about $4.5 to $5 billion this year. Approximately $1.6 billion, or one-third of the world outlay, is slated to be spent by companies in the United States. The proportion is slightly larger than this country's share of world steel output, which was around 29 percent last year. Russia, which produced 20 percent of the world's steel last year, will probably spend at least $1 billion.

Ingot production last year amounted to 87.4 million net tons as against 81.1 million in the previous year. Shipments of finished steel products last year were 66.4 million net tons and 58.9 million during 1958.

The Institute estimated that steel production in the week ended April 10 would amount to 85.9 percent of theoretical capacity equivalent to 2,447,000 net tons of steel. Output in the previous week was 2,527,000 tons, 2,654,000 in the comparable week one month ago and 2,641,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
118.40	118.40	118.40	118.57

For Current Prices See Page 11

Basic Products

Benzene—The market shows no improvement from a supply standpoint. In addition to sustained high level production of styrene monomer and phenol, seasonal demand has been at a peak. Insecticides, such as DDT and BHC, take a fair amount of benzene as raw material. Offers as high as 42c. and 45c. per gallon in bulk have been reported for benzene for export, but material is unavailable.

A sustained heavy demand for phenol for laminating and in molding powers as well as spiraling sales of styrene monomer to the rubber and plastics industries are felt to be the basis for the continuation of the benzene shortage.

Output of phenol in the last quarter of '59 was 240 million pounds against 186.7 million pounds in the corresponding quarter of 1958. Comparable figures for styrene monomer are 541.8 million and 467.3 million pounds respectively.

Creosote—With warmer weather, maintenance work is expected to hit an uptrend. The improvement should be reflected in improved sales of creosote, sources say. Railroads buying of white ties for curing has shown some improvement, it is said.

Price in this market has been unchanged since the 2c. per gallon advance of April, 1959, which brought the tankcar listing on straight No. 1 creosote oil up to 24c. per gallon in tankcars. Solutions are priced on a basis of 24c. per gallon for creosote and 17c. for coaltar.

Pyridine—Suppliers remain sold out till late summer at least, according to most reports. Material is moving to contract customers. Any small lots of resale pyridine moving to the export market command premiums. Reports indicate a resale price of about 80c. per pound.

Tar Acids—Market is unchanged. Movement to established outlets has been sluggish, although some sources note that last month's sales were an improvement over the first two months of the year. A freer supply of phenol, than has been the case for many months, is also reported.

Toluene—The market is unchanged from the 25c. per gallon delivered price quoted in the trade for many months. An upturn in paint sales is expected to boost toluene sales volume during the current quarter. Supplies are fully adequate for trade requirements. Localized shortages continue to be reported in the Gulf area.

Xylene—In a move that caused some surprise in trade circles, a petrochemical producer announced that a 70 million pound o-xylene unit was being completed at Corpus Christi, Tex. in June. Two months earlier a second petrochemical firm had announced that it too was planning an o-xylene unit of 70 million pounds. This unit is to be on stream by early '61 at Big Springs, Tex.

A major target for o-xylene producers is the firm Japanese market which has developed and is slated to take up a good part of output in the years immediately ahead. Despite the strength of this market, however, sources speculate on the possibility that some of this o-xylene capacity could be put to work making phthalic anhydride. Currently, only one petrochemical source in this country produces phthalic anhydride from o-xylene and another unit, which came on stream this spring, makes PA from a mixed xylene stream.

The shortage of naphthalene, resulting from the steel strike, caused most producers to try running o-xylene last fall. The majority have returned to naphthalene use since it is easier to work with and yields are better.

Intermediates

Acetanilide—Price in this market has been steady since a 1½c. per pound advance in technical material in October, 1956. In the same period, aniline declined 3c. per pound and acetic acid was unchanged.

Demand from dyestuffs outlet remains active. Stocks are adequate to cover trade requirements.

Aniline—Tankcar price is unchanged at 18c. per pound, while carload or truckload lots are 20c. per pound and less carlots are 21c. per pound. Sources feel they have a good start toward equaling last year's brisk sales pace.

Production of aniline last year amount-

US Coal Chemical Consumption: 1958

The following figures, compiled by the Bureau of Mines, indicates consumption of light oil and tar products in the United States in 1958. Statistics are reported in thousand metric tons. Benzene, toluene and xylene figures include material made from petroleum.

Product	Production	Imports	Exports	Apparent Consumption
Benzene	911	148	38	1,021
Toluene	788	2	84	706
Xylene	654	1	..	655
Pitch	1,784	1	58	1,727
Tar Oils	671	137	3	805
Naphthalene	154	37	..	191

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Coal Chemicals

ed to 130 million pounds, a 30 million pound increase over 1958.

Benzoic Acid—There has been some report of increased use of benzoic as a chain stopper in alkyd resins during the past year. Price is high, though, and applications are usually limited to short oils, sources say.

Cyclohexane — Market is unchanged from previous report. Additional capacity is on the way. A new producer is working the kinks out of a new plant in the southwest. Standing in the wings, is another petrochemical source with 20 million gallons of capacity expected to come in by the end of the year.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended April 10, was as follows:

Ammonium liquor	lbs.	764,453
Ammonium sulfate	lbs.	32,574,292
Benzene	gals.	3,141,246
Coaltar	gals.	17,169,277
Crude chemical oil	gals.	502,025
Solvent naphtha	gals.	100,405
Toluene	gals.	702,835
Xylene	gals.	200,810

b-Naphthol—Material remains one of the better bargains in the trade despite the fact that producers had to yield to cost pressures and raise the price 1c. April 1. Listings had been unmoved since 1956.

1,4-Naphthoquinone—A producer expects to achieve commercial production on this item sometime in the curent quarter. Material will come from a new, continuous process plant located at Bound Brook, N.J. Price in truckload lots will be 52c. per pound; less truckload, 54c. per pound.

Phthalic Anhydride—Market remains unsettled as flake material in carload of drums is quoted at 17c., 18c., 19c. and 21c. per pound by the various producers. Proposed plasticizer price advances for the second quarter failed to go through.

Phthalic remains in tight supply but consumers are getting sufficient material to maintain manufacturing operations. Trade sources look for a period of uncertainty in which cautious buying will be increasingly evident as phthalic attains a more equitable supply-demand balance.

Styrene Monomer—Sustained high level sales of styrene monomer to the rubber industry have kept suppliers jumping to supply needs for new equipment and a sizable replacement tire market. Burgeoning plastic sales have likewise served to swell monomer output. The pace has been so swift during recent months that a benzene shortage, touched off by the four-month steel strike, has hung stubbornly on beyond what trade observers had anticipated. In addition, a tighter supply on ethylene has been reported since early this year.

Tariff Commission figures for January reveal a sharp increase in styrene monomer production. Output during January of this year was 146.8 million pounds as against a 117.1 million pound figure reported for January, 1959.

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Jobs & People

American Agricultural Chemical Company, New York—**Norman F. Spencer** has been named a regional agronomist in the company's Fulton, Ill., office. **J. D. DeHaan** has been assigned to the headquarters staff of the New York office to assist in coordinating sales promotion.

American Mineral Spirits Company, Chicago—**Kenneth W. Keys, Jr.,** has been named a sales representative for technical naphthas and petroleum solvents with headquarters in Columbus, Ohio.

Armour Industrial Chemical Company, Chicago—**Keith Holmes,** formerly with DuPont of Canada, has joined Armour as eastern Canadian sales representative.

Chemore Corporation, New York—**Samuel B. Lippincott** has been named manager of the fibers division, where he will be responsible for marketing and commercial development in the US of Montecatini's new polypropylene fiber, "Meraklon."

Commercial Solvents Corporation, New York—**Charles R. Hamilton** has been named a sales representative in the mid-Atlantic office at Newark, N. J. **J. H. Brinton Marple,** resident salesman in Louisville, Ky., has been transferred to Philadelphia. **Leon Seifert** has been transferred from the Newark office to Houston, Tex.

International Minerals & Chemical Corporation, Skokie, Ill.—**Richard V. Falck** has been named district sales manager at Midland, Tex., for the industrial chemicals department, replacing **Edward Hayes,** who has moved to company headquarters as a special project manager with the long range planning group.

Eli Lilly & Co., Indianapolis, Ind. —**Robert J. Manning** has been appointed manager of the Hartford district, succeeding **Frederick W. McNabb,** who has retired.

Morningstar-Paisley, Inc., New York—**David Bookshester** has been appointed sales manager for the adhesives division. **Thomas W. Morningstar,** vice-president and general manager of the gum and technical products department, has been elevated to executive vice-president.

Sterling Drug Company, Inc., New York—**David J. Fitzgibbons** has been named a vice-president and has been designated executive assistant to the chairman of the board and the president. **Keith Norris** has been advanced to the position of general sales manager of Sterling Drug Mfg., Ltd., Aurora, Ontario, Canada.

Velsicol Chemical Corporation, Chicago—**Emil F. Bless** has been appointed sales representative in the agricultural chemicals division.

Warren Petroleum International, New York, a subsidiary of Gulf Oil Corporation—**E. D. Brockett** and **I. G. Davis** have been elected to the board of directors.

Cancer Experts Fight Disease, Argue Legislation

—*Continued from page* 3

Flemming, back to the witness stand to comment on the views of the scientists. There is also the possibility that the Department of Agriculture may be asked to testify again.

The panel of scientists that appeared before the committee last week had been selected by the National Academy of Scientists at the request of chairman Harris.

Several of the scientists are members of the Food Protection Committee of the National Research Council, two others are connected with the National Cancer Institute, whose views Secretary Flemming has followed in supporting the Delaney amendment, and others are well known scientists connected with various universities and private research organizations.

Dr. William J. Darby of the Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, Tenn., served as chairman of the panel.

Doctors Take Firm Stand

Among those who took a firm stand against any change in the Delaney clause, the most outspoken were the two scientists from the National Cancer Institute—Dr. Harold L. Stewart and Dr. G. Murroughs Mider.

Dr. Stewart expressed himself unequivocally that "it is not possible to establish a safe dosage for a carcinogen for food consumption" and added that he favored retaining the Delaney clause.

He argued that the toxic effect of poisons on body tissues is not the same as those of a carcinogen. A person can recover from toxic effects of poisons and build up a resistance in many cases, but this is not true in the case of carcinogens, he said.

Dr. Mider agreed with Dr. Stewart that the Delaney clause is justified and attacked the critics who say that it fails to allow for scientific judgment in cancer questions. He said that scientific judgment does enter the picture because the law requires a finding as to whether a substance is carcinogenic and whether appropriate tests had been made.

He admitted that once that decision is reached, however, it allows for no scientific judgment as to whether the substance can be used with safety. He acknowledged that the National Cancer Institute has been running most of its tests of substances to determine whether they are carcinogenic on the basis of injections and subcutaneous administration. It has done very little testing by oral ingestion of the substance.

Under questioning, he admitted that different results can be obtained depending upon the method of testing followed.

This was emphasized later by Dr. Charles J. Kensler of the Department of Pharmacology of the School of Medicine, Boston University. He pointed out that different results are obtained not only by making tests with different species of laboratory animals, but by using different strains of the same species.

He said that it was possible to produce tumors under one circumstance while they will not show up in another.

Selenium Cited As Example

Dr. Floyd DeEds of the USDA Western Utilization Laboratory said that selenium was a good example of the point made by Dr. Kensler. He said that selenium is an essential element in the diet of animals to prevent certain diseases, yet it is capable of producing cancer of the liver under certain circumstances, while under another set of circumstances it becomes a toxic substance.

A point made by some of the scientists was that almost everything can be shown to be capable of producing cancer under certain conditions, and Dr. M. R. Zavon of the Kettering Laboratory of Industrial Health, Cincinnati, Ohio, predicted that "the time will come when we will find many common items of present day diets will be found capable of producing cancer."

Some of the scientists stressed the fact that what is needed is a clearer definition in the law of the meaning of the term "carcinogen." It was pointed out that there are some substances capable of quickly producing cancer while other substances are incapable of producing cancer except over long periods of use.

Delaney Seen Retarding Research

At least one member expressed the belief that the Delaney clause will retard research in this country because there will be no incentive to carry on research in a particular substance once it has been determined to be a carcinogen.

Others believed it would encourage research in order to find substitutes for carcinogens.

Panel chairman Darby expressed the belief that there was adequate protection in the law against carcinogens being introduced into the food supply without the necessity of the Delaney clause. He advocated requiring the HEW to call upon a panel of experts for advice whenever the question of permitting the use of a carcinogen becomes an issue and recommended that the data available to the panel upon which to base its opinion be made a matter of public record. Several panel members supported this view.

PHARMACEUTICAL MANUFACTURERS ASSOCIATION

SECOND ANNUAL MEETING

Boca Raton, Florida

APRIL 4-6

Prescription Drug Industry Making New Jobs Faster Than Any Other

The prescription drug industry is providing new jobs three times faster than all other manufacturing while growing in dollar volume twice as fast as the national economy, a noted economist told the Pharmaceutical Manufacturers Association. Furthermore, the industry's wholesale prices have actually declined 6 percent during the inflationary period since 1947-49, while the all-commodities index has risen 18.9 percent. This is the economic picture painted by Dr. Jules Backman, research professor of economics at New York University.

William B. Graham

Dr. Backman reported to the pharmaceutical producers that employment in drug and medicine manufacturing is 104,000, up 20 percent since 1947. In all manufacturing, he said, employment is 16,156,000, only a 5.7 percent rise in the same period.

Total sales of both prescription and over-the-counter drugs have risen to $2.7 billion from $890 million, he said. This is a growth of 203 percent, against a gain in the total gross national product of 105 percent.

Drug Prices Versus Others

"However," Dr. Backman pointed out, "the dollar increase in gross national product was due to higher prices to a greater degree than was true of the pharmaceutical industry.

"Thus, the general wholesale price index rose by 23.9 percent and the consumer price index by 31.4 percent between 1947 and December 1959. In the same period, wholesale drug prices declined by 11 percent and retail drug prices increased by 28.2 percent.

"It is evident," he declared, "that the increase in manufacturer's sales in the drug industry was due largely to greater volume.

"A similar pattern developed in the twenty-year period from 1939 to 1959. Drug sales rose by 800 percent as compared with the increase of 426 percent in gross national product."

Dr. Backman said this growth, together with "greater risk exposure, rapid product innovation and obsolescence, more intensive promotion and understatement of net worth," are among the factors contributing to the industry's profit levels.

Here's what the NYU profesor had to say about three of these factors:

"Greater Risk Exposure: Since the drug industry is one in which a relatively high percentage of sales arises each year from new products, change is the rule rather than the exception. New products account for a larger proportion of total drug sales than in almost any other business.

"Profits tend to be higher in new than in older established companies and industries. As a result, this factor contributes toward the relatively higher rate of return which has marked the industry over the longer-run period.

"It should be added that efforts to promote new products are not always successful, nor does all expenditure for re-

—Continued on page 56

Drug Story Must Be Told to Public: Graham

If they are to survive in their present form, pharmaceutical producers must make the public understand that their "competitive system of drug research, manufacture and distribution works more to the benefit of society than could any other system."

That's the prescription which William B. Graham, outgoing chairman of the Pharmaceutical Manufacturers Association, feels is needed.

Mr. Graham, who is president of Baxter Laboratories, Inc., Morton Grove, Ill., told PMA that the public must be made to understand what the drug industry's functions really are.

"The public must be brought to understand," he said, "that research of a drug comprises not only discovery of the chemical entity, but also careful, tedious, long-term and expensive evaluation of the effects of the compound, first in test tubes, then in animals, then in human beings.

"The public must be brought to understand that manufacture of a drug comprises not only obtaining the new ingredient, but also formulating or compound-

—Continued on page 54

Pharmaceutical Manufacturers Warned Time Is Running Out On Socialized Medicine Issue

Time is fast running out on the drug industry. It has only until 1964 to make up its mind whether it wants to be "socialized" or whether it would like to continue under the free enterprise system. The next four years will be a "very critical period." Such was the stern warning issued by Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association, last week at PMA's second annual meeting in Boca Raton, Fla.

Dr. Austin Smith

If there is any lingering doubt about the strong pressures that can be brought to bear on the national health question, Dr. Smith said, one need only consider this fact: 38 million people in the United States are now eligible for part-time or full-time medical care paid for by the government.

The PMA president noted, too, that significant changes are being made in the social security act by almost every congress. And, he added, legislative proposals affecting the drug industry are bobbing up increasingly.

Drug Industry Bills in Hopper

Already in the congressional hopper, he reported, are measures dealing with the licensing control of drugs, the questions of generic versus trade names and patents.

Pharmaceutical makers must meet these new challenges head on, Dr. Smith contended. Here are some of the things he believes they must do:

- Individuals in the drug industry must take an active interest in politics at the local, state and federal levels.
- Information about the pharmaceutical industry must be shared and used on a cooperative basis.
- The industry must develop a socio-economic program.

The PMA president pointed out that the association presented a nine-point program in its testimony before the Kefauver drug investigating subcommittee.

He also called attention to the widespread favorable response which greeted the American Medical Association's recently-announced plan to set up a study commission to look into medical care costs.

AMA has anted up $100,000 as a starter for what it bills as its own "Little Hoover Commission." Dr. Smith is of the opinion that PMA should undertake something similar with respect to drugs.

Turning again to Kefauver drug pricing probe, the PMA president maintained that it offers a number of object lessons for pharmaceutical manufacturers.

Lack of Information Called 'Shocking'

"The first," he said, "reveals how much information the prescription drug industry needs to gather about itself; the lack of information has been shocking and hurtful to the industry.

"Your story," he went on to tell the drug makers, "is a good story to tell and is an inseparable part of the medical care story, and yet those who could help you tell it most effectively have had to wait until facts were gathered. And they have to continue to wait in some respects while more facts are gathered.

"I mention this not in criticism but to warn that much remains to be done. I might also add, however, that this industry is not unique; other industries have had to pass through this difficult period when under attack.

"Furthermore," Dr. Smith continued, "industries and professions that provide services for the public seem to be par-

—Continued on page 53

Drug Industry Seen Target for Politicians

A number of public officials—state and federal legislators and administrators—"seem to be making a career" of conceiving restrictive measures to regulate the drug industry.

This is how John K. Worley, general counsel of the Pharmaceutical Manufacturers Association, sums up the situation in which drug makers find themselves today.

Mr. Worley reported to PMA that "at least three state legislatures have even been prompted by the synthetically aroused public opinion to entertain bills for the creation of commissions or committee to investigate the drug industry."

One major worry over this already alarming state of affairs, he said, is that federal administrators who have been previously sympathetic with the industry's regulatory problems "may nevertheless be fearful of executive and congressional censure if they appear fair and reasonable in seeking solutions with our industry."

If this takes place, Mr. Worley declared, it will constitute a "marked setback to the administrative and industrial statesmanship" which PMA has fostered over the years. Neither the public nor the drug industry can benefit by such a development, he maintained.

Here are key passages in Mr. Worley's detailed report on the activities of the

—Continued on page 60

PMA Budget Goes Up A Whopping 50 Percent

Pharmaceutical Manufacturers Association intends to step up its spending during 1960-61 by a whopping 50 percent.

According to S. Barksdale Penick, jr., president of S. B. Penick & Co., New York, PMA's 1959-60 budget is "already out of date."

Reports Mr. Penick, who is treasurer of the association, some $500,000 was budgeted for the current fiscal year and, by June 30th, PMA expects it will be running a deficit of around $139,000.

As a result, the drug producers organization is earmarking $750,000 for expenses during the upcoming fiscal year.

To meet the higher anticipated expenses, the association last week adopted a higher dues schedule.

Drug Industry PR Outlook: Worse Before It Gets Better

If the pharmaceutical industry is worried about its public image today, unfortunately, it may not draw much consolation from the immediate future. In fact, things very likely will get worse before they get better.

So says one of the experts in the field—Bert C. Goss, president of Hill & Knowlton, Inc., nationally-known public relations firm.

Mr. Goss told the Pharmaceutical Manufacturers Association that each new probe or set of hearings bearing on health care will probably aggravate existing problems.

In his view, the Kefauver drug pricing investigation "has merely accentuated trends of public opinion that may well have existed before the hearings began."

He cited a number of factors that "have plunged the prescription drug industry into one of the major public controversies of our times."

Among them are a generally mounting public concern over all aspects of medical care, which has made them "prize political matters"; the resentment people feel toward paying medical care costs; "an unusual degree of public ignorance" about prescription drugs, and the vulnerability of the drug industry, in contrast with the medical professions, to criticism.

To combat these problems, Mr. Goss proposed a public relations program based upon "sound policy and operations in the public interest." He said that providing the public with adequate information about such operations "will, over the long pull, engender substantial public support."

"Only a charlatan would promise that public relations activities can solve the industry's difficulties and make them disappear," he asserted. But if the public could be made aware of the industry's re-

—Continued on page 58

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PMA Meeting Report

Pharmaceutical Manufacturers Warned Time Is Running Out

PMA'S BOARD CHAIRMAN: Harry J. Loynd, president of Parke, Davis & Co., Detroit, Mich., who is the new board chairman of the Pharmaceutical Manufacturers Association.

—*Continued from page 51*

ticularly prone to ignore gathering information about themselves until prodded to do so; they usually are too busy to meet public needs to worry about something that they more carelessly think is not much more than a display of self-aggrandisement.

"The pharmaceutical industry must know by now, however, that its members must do some self-searching and self-revealing or others will do it for them, and not in a friendly way."

Straightening Out the Record

In the second place, the PMA president pointed out, the drug hearings have shown that "there are many people in many walks of life" who would like to straighten out the record on the pharmaceutical industry. But, he emphasized, they need the facts.

"Without facts which we should have had long ago and only now are developing," Dr. Smith declared, "they cannot be of much assistance even though they have a deep faith in the objectives and pursuits and conduct of the industry.

"These people believe, even as you and I do, in what we so casually refer to at times as the free enterprise system. They believe too in a man doing for himself what he can rather than asking the government to do it for him.

"This is the way the USA grew and prospered. It was also the way other countries grew and prospered, but something happened to them, the something being an irrevocable extension of government control. I am worried about this happening in our country."

Dr. Smith went on to assess the "unexpected emotional response that ensued as the hearings progressed."

"For several years," he explained, "some of us had been warning that the spotlight of public attention would be focused on the drug industry as it had on the medical profession in earlier years. And we warned that other members of the health team would in turn be scrutinized.

Depth of Response Seen Surprising

"Well, such predictions were justified; events have and will continue to prove this. However, the surprising element was the depth and breadth of the emotional response. Some wonder why.

"While there may be other factors," he said, "I think it was based at least in part on a lack of knowledge concerning the pharmaceutical industry and health affairs in general, on an increasing concern over health, and on general unrest stirred up by those who would prefer governmental direction to private initiative.

"I must admit with some chagrin that I appraised poorly the speed with which this phase of our challenge would move even though for twenty years I have been studying medical care very carefully.

"Another thing not to be ignored, of course, is the fact that the drug industry was singled out for attack. This in itself was a certain way to raise confusion and doubts, then criticism. In this lies a lesson, however, for the future."

The PMA president also called attention to the fact that the drug hearings are taking in all members of the pharmaceutical industry.

"No firm regardless of size or location is exempt from criticism directed at the industry as a whole," he maintained. "Nor can the industry escape the effect of an attack on one firm.

No Discernment by Public

"The public does not take time to exercise the discernment necessary to keep firm and industry separated. Nor does the public have enough facts, which means enough knowledge, to make this possible.

"It may be regrettable," Dr. Smith stated, "but it is not a unique situation. The pharmaceutical industry is much like other industries, even professions, in this respect."

Though the crisis is serious and it is very late in the game, the PMA president said he is confident that it will still be possible to bring about evolutionary changes in the nation's health care picture—and, thus, prevent "irrevocable extension of government control.

PMA elected two new members to its board of directors for three-year terms. They are Robert A. Hardt of Armour Pharmaceutical Company, Chicago, and James B. Zimmerman of Benzol Products Company, Newark, N.J.

AMA Says 'Big Push Is On' For Health Care Legislation

"The big push is on" for health care for the aged. In fact, Dr. Leonard W. Larson, believes it "may become the major domestic issue in the coming Presidential campaign."

Dr. Larson, who is chairman of the board of trustees of the American Medical Association, told the Pharmaceutical Manufacturers Association that no compromise is likely along the lines proposed in the Forand bill.

"I want to assure you," he said, "that none will even be considered which would utilize the social security compulsory approach.

"The chips are down—the situation is crucial, and we along with many stalwart allies, both in and out of congress, are in there fighting every step of the way.

"We are fighting against any compulsory tax approach," Dr. Larson declared, "because we believe that such an approach will not lead to better medical care for all, or any part of, our population.

"We, and all of the other members of the health team, firmly believe that many health care problems have been solved without such an approach, and that those problems which remain are in the process of being solved through the use of private initiative and a sense of individual responsibility both on the part of the patient and on the part of all of the members of the health team."

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PMA Meeting Report

Drug Story Must Be Told to Public: Graham

—*Continued from page 51*

ing, packaging, labeling, testing and numerous steps for control.

"The public must be brought to understand that distribution of a drug comprises not only shipment from the manufacturer, but also the education of the physician as to the availability of the drug, as to its composition, as to its clinical history, as to when and how to use and not use the drug. Distribution also included the protection of the public through the physician's knowledge in prescribing the drug.

Distribution Includes Protection

"Distribution," Mr. Graham continued, "also includes protection to the public through the pharmacist's skill in filling the prescription, and through his expense in stocking the drug, to make it immediately available.

"The public must be brought to understand that the accomplishments of the American pharmaceutical industry are unique in the world. That our research of valuable new drugs is unparalleled. That we manufacture drugs which, for efficacy and purity, are excelled nowhere, and are seldom rivalled.

"That we distribute drugs—in cooperation with the physician and the pharmacist—through a system which makes American prescription drugs immediately available, professionally prescribed, and reliably supplied, in a manner that is matched no place else in the world."

Mr. Graham pointed out that 1959-60 has been quite a year for the drug industry, a year when it had its own "Pearl Harbor Day"—December 7, 1959, the start of the congressional hearings.

In the face of "criticism, which at times has been extravagantly adverse, uninformed and often unfair," the industry he said, has improved its posture.

In support, he cited the way in which the drug makers have responded to emergency health needs.

"A most recent example," he reported, "was the earthquake at Agadir, Morocco, in which hundreds lost their lives. The International Red Cross reports that every American drug house which was asked to contribute medical supplies responded with immediate and substantial gifts of drugs."

Drug Industry Role in 'Hope'

Mr. Graham went on to point out that "Hope," the floating hospital, medical center and school which will set sail for southeast Asia in the next few months, owes its existence to many of the figures in the American drug industry.

What's more, he said, US drug producers will contribute about $1 million worth of pharmaceutical preparations each year to the project.

Medico, the medical missionary undertaking, has gotten nearly a half million dollars worth of drugs from American pharmaceutical houses, Mr. Graham indicated.

"Another project of importance to our western freedom," he said, "is the Polish medical aid program. Under agreement with the Gromulka regime, we are allowed to ship American drugs direct to Polish hospitals.

"These drugs—donated by some twenty companies from our competitive American pharmaceutical manufacturing industry—are either in short supply or nonexistent behind the Iron Curtain.

"Probably through no other industry," he concluded, "can the superiority of our competitive system be demonstrated so impressively. This project has been termed an outstanding example of 'People-to-People diplomacy.'"

PMA CHAIRMAN-ELECT: Eugene N. Beesley, president of Eli Lilly & Co., Indianapolis, Ind., who has been named chairman-elect of the Pharmaceutical Manufacturers Association. Mr. Beesley will automatically succeed to the PMA board chairmanship in 1961.

Mail-Order Drugs Lead To Prescriptions by Gov't

If privately-run mail-order drug houses are accepted, "we are only one step away from government-operated mail-order prescription service."

So the Pharmaceutical Manufacturers Association was warned by Dr. William S. Apple, secretary and general manager of the American Pharmaceutical Association.

Dr. Apple said he is convinced that "we are also only one step away from diagnosis by mail order."

"Since May, 1959, when the American Pharmaceutical Association learned of the plans of the American Association of Retired Persons to establish a drug buying service," he reported, "we have continuously followed and reported on this development.

"The initial reaction of responsible persons in government, in the health professions, and in the pharmaceutical industry was that we were dealing with a passing fad—that the public would not support such plans with its patronage.

Impetus of Kefauver Hearings

"But they did not foresee the impetus to this movement which resulted from the Kefauver hearings. The senator was most patronizing in eliciting favorable testimony from Dr. Andrus and her colleagues when they testified last December.

"From a pineboard operation in September," Dr. Apple continued, "the Retired Persons Pharmacy, Inc., in a few months, thanks to false impressions regarding ethical drug markups emanating from the hearings, sprouted into a full-scale four-story warehouse mail-order depot.

"Other operators sensing the opportunity of the moment quickly appeared in every sector of the country."

The most recent on the scene, Dr. Apple said, is the National Drug Plan of Washington, D.C., which opened for business just last week.

"The mail-order mechanism is dangerous," he declared, "because it eliminates the personal professional relationship between the patient and the pharmacists on one hand and the prescriber and pharmacist on the other hand.

"The mail-order mechanism," he contended, "breeds inferior pharmaceutical service and is not in the public health interest."

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PMA Meeting Report

Prescription Drugs Creating New Jobs

—Continued from page 51

search eventuate in a commercially saleable product. Uncertainty, it has been said, is perhaps the most important single factor accounting for traditionally higher profits in some industries than in others.

"Rapid Product Obsolescence: In the drug industry, great risks are present because of the extremely rapid pace of new discovery leading to product obsolescence.

"As more dollars have been funnelled into research by more companies, as well as government and independent organizations, there has been a decided shortening of the life span of new products. Thus, the risk of product obsolescence is greater today than ever before.

"Once competition has caught up—and the grace period allotted is foreshortened now by foreign as well as domestic competition—the initial producer is faced with product obsolescence and with the shrinking markets which accompany the emergence of new producers.

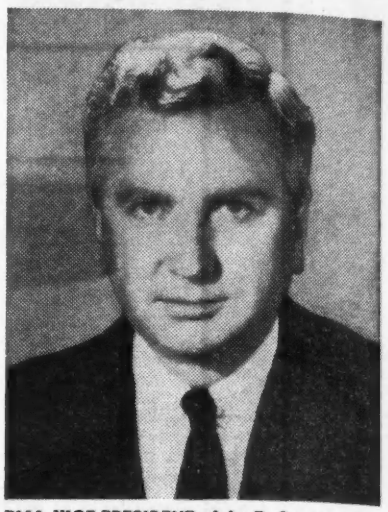
"Intensive Promotion: Drug companies perform an important educational job. Your salesmen spend considerable time with doctors to acquaint them with new drugs and their therapeutic characteristics. It must be directed to him."

Dr. Backman went on to point out that "investment in the drug industry is more in terms of trade name and product brand than in brick, mortar and equipment.

"Such investment," he noted, "is usually entered on the books at token value as good-will. It does not appear as capital which adds to net worth.

"As a result, the total net worth of the industry is understated. When profits are compared with this understated net worth, the resulting return is reported to be higher than comparable rates of return in other industries."

Contributing to the industry's above-average rate of profits, he continued, is its above-average rate of growth. Then, too, he pointed out that there are several other factors to consider in regard to profits.



PMA VICE-PRESIDENT: John T. Connor, president of Merck & Co., Rahway, N.J., who has been elected a vice-president of the Pharmaceutical Manufacturers Association.

"First," Dr. Backman declared, "there is no yardstick available to determine what is a 'fair' profit. Comparisons with average rates of profit in the economy prove exactly nothing concerning the 'fairness' of profits. The nature of an average is such that some companies and industries will be above and others will be below the average. This does not mean that above-average are to be criticized or that below-average profits are to be praised.

"Secondly, the phrase 'gross profit margin' is an unfortunate one in any industry but particularly so for drugs where so small a part of the sales dollar is accounted for by manufacturing costs. The

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PMA VICE-PRESIDENT: Kenneth F. Valentine, president of Pitman-Moore Company, division of Allied Laboratories, Inc., Indianapolis, Ind., who has been elected a vice-president of the Pharmaceutical Manufacturers Association.

manner in which the Kefauver staff has misused these figures provides recent evidence on this point. The term profit should be reserved to describe what is earned by a company after deducting *all* costs and taxes.

"Third, a drug company doesn't know precisely what profit it earns on any particular product or group of products. A major part of all costs is usually allocated among all products on some arbitrary basis which has little or no relationship to the costs actually incurred.

"For example," Dr. Backman asked, "how many of the companies producing tranquilizers charged as costs for that product, the full expenses in time and money required to testify and prepare for testimony before the Kefauver committee? And if such charges were not made, how meaningful is any profit estimate for such products?

"The same problem arises in connection with many of the expenditures for promotion, administrative costs, and other items. These costs generally cannot be separated for specific items.

"Finally," he said, "most drug companies sell a large number of products, some of which are made available even though the market has shrunk or is much too small to yield any satisfactory profit. Nevertheless, by supplying these products the company builds up good will which may contribute significantly to a higher volume of sales for other products.

"Under these conditions, even if separate costs could be completely calculated they would not be too meaningful as a guide to the *real* costs and profit rates for individual products. Moreover, if some products did not yield above-average profits, these items with below-average profits or losses could not be made available—to the serious disadvantage of the persons for whom they are prescribed."

Drug Industry PR Outlook: Worse Before It Gets Better

—*Continued from page 51*

markable contributions to longer and healthier lives, Mr. Goss felt, criticism rooted in ignorance and misunderstanding could be allayed.

He urged that the manufacturers individually and as a group employ modern and effective techniques to acquaint the medical care team and the public with the true contributions of the drug industry to the public welfare.

This would require the development of more industry-wide information about pharmaceutical economics and research and the formulation of speaking programs and other informational activities.

He said that ultimately the prescription drug industry should seek to achieve a position of leadership "as spokesman for the public interest in national and local policies relating to the health needs of the American people."

Drug Industry—Plus and Minus

To establish the goals of a public relations program, Mr. Goss said, it is well to look first at what the drug industry has—both plus and minus. Here are what he views as some of its liabilities:

- The industry is profitable and successful, therefore, constantly open to attack.
- It's a very new industry, not only new, but growing so fast that it hasn't had time to present itself to the public properly.
- PMA is brand new.
- The ever-growing and all-consuming interest in public health.
- Drug costs and public irritation resulting from them.

Here, in Mr. Goss's view, are some of the drug industry's assets:

- Industry products are not questioned. Sen. Kefauver himself has cited their contribution to public health.
- The industry has a reputation for growth and constant research.
- The pharmaceutical industry is unique for public relations:

Plants are widespread geographically.

The large number of detail men employed by the industry can serve as an effective means of spreading its story around.

The industry employs a larger number of scientists than any other. These intellectuals tend to meet on a common ground and could be helpful in contacting others who, at present, are tending to be harmful through their questioning.

The relationship of dealers is the best of any industry.

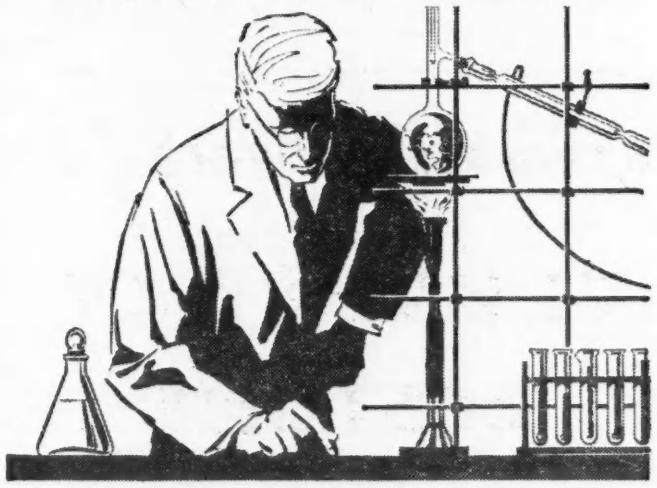
- Investors in drug and pharmaceutical securities are among the happiest in the country, and therefore should be interested in maintaining the strength of the industry.
- The close relationship with the medical team forms the basis of another intellectual mobilization.

PMA EXECUTIVE VICE-PRESIDENT: Dr. Karl Bambach, who is the executive vice-president of the Pharmaceutical Manufacturers Association.

- Enterprise. If this industry fails, then all others must be careful.

The job of overcoming the problems that exist in the pharmaceutical industry today can be done, Mr. Goss maintained, but it must be done seriously. After all, he said, businesses have come back in the past and can come back again when their policies are sound, but this job is up to

PROFILE OF EXPERIENCE



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PMA Meeting Report

PMA VICE-PRESIDENT: George R. Cain, president of Abbott Laboratories, North Chicago, Ill., who has been elected a vice-president of the Pharmaceutical Manufacturers Association.

each individual company and everyone of their personnel.

That PMA is already moving in the direction suggested by the Hill & Knowlton executive was indicated in the report by G. Frederick Roll of Smith, Kline & French Laboratories, Philadelphia, chairman of the association's public relations section.

Here, said Mr. Roll, are some of the section's accomplishments during the past year:

- We gave important help to the assembling and preparation of information for PMA testimony.
- The section contributed materially to the preparation of PMA testimony on medical research before the subcommittee on appropriations—the Jones committee.
- We cooperated with the State Department in the creation of a pharmaceutical industry exhibit at the recent Berlin Trade Fair.
- The creation of the "PMA Questions and Answers" pamphlet was published at our urging as well as suggesting to the president his "Report to the Nation" speech be given at the midyear meeting.
- We are actively cooperating with the Pharmaceutical Advertising Club in the preparation of copy for industry ads.

In the year ahead, Mr. Roll continued, the PMA section plans these public relations projects:

Ahead in Drug Industry Public Relations

- An effective information exchange program. This is already under way by the PMA staff, Mr. Roll said, but unless member companies remember to keep our headquarters in Washington on their mailing lists for copies of speeches, annual reports, local news clips, special company publications, a really effective job is impossible.
- A PMA facts book as a continuing source of information about our industry and in this connection there is a "crying need" for more factual information in many critical areas.
- More and more speeches to more and more people both at the national and local levels. "We must guard against the tendency to talk to ourselves and go directly to the public by speaking before civic clubs, Rotary and Chambers of Commerce," the SK&F executive warned.
- A depth survey of public opinion so that we might better pinpoint our objectives and also to serve as a benchmark from which future PR activities can be evaluated.
- A paid advertising program to gain wide public understanding and support to bolster and bind together all of our individual PR efforts.
- A well planned research conference staged by PMA in cooperation with the National Association of Science Writers with our top research leaders participating. Such a conference, he felt, will help give our total research effort more public visibility.

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PMA Meeting Report

Drug Industry Seen Target for Politicos

—Continued from page 51

PMA general counsel during the past year:

FDA Warning Statements — As previously stated, through the courtesy of Commissioner George Larrick and Dr. Holland, then FDA medical director, we were given an opportunity to have industry review the proposed required and recommended cautionary and warning statements on O-T-C drugs.

A number of meetings were held between members of the medical and law sections and with representatives of FDA and a number of our objections presented in writing were resolved, prior to the proposed draft inserted in the *Federal Register* by FDA just before our April, 1959, annual meeting. Meetings again were held between representatives of the

John K. Worley

medical and law sections and a detailed protest was filed with FDA on behalf of PMA directed at the proposed form of regulation.

The final form of the regulation has now been published and only a few of our later objections were met. However, the proceedings were thoroughly amicable and evidence of the fine spirit of cooperation that exists between FDA and the ethical drug industry.

MMSA Purchases Abroad—The Military Medical Supply Agency several months ago turned down the low bid from a producer in this country and a member of our association for a sizable lot of tetracycline tablets. Strangely enough, the turndown came on Pearl Harbor Day, December 7, 1959, and the day of the opening of the Kefauver hearings. The contract was awarded to an Italian firm that is a patent pirate, and only a broker at that.

The material is being picked up in Italy by navy conveyances—boat or plane. We have filed a vigorous protest on behalf of the industry to the Comptroller General and later to the Department of State, as we feel certain that future buys will be made by MMSA in Italy and elsewhere abroad from patent pirates (exclusively for reasons of price) of other products on which our member firms hold patents. We will continue our efforts to be effective in this area.

Coaltar Color Regulations—Several orders of FDA were pushlished in the *Federal Register* a few months ago: Two to delist a total of nineteen of the colors, some of which are important to our industry, and one providing for prompt decertification of colors previously listed and certified, and which have been removed from the list of approved colors. Meetings have been held between representatives of the pharmaceutical contact and laws sections and we have prepared and filed objections to these final orders, as well as the preliminary orders, and demanded public hearings.

At the time of the hearings, held in February and March, 1960, we presented a statement, with supporting scientific evidence, challenging the validity and reasonableness of the FDA tests on the basis of which the delistings orders were issued. We did not otherwise engage in the hearings, believing that the result was a foregone conclusion, and that we could better turn our attention to the public hearings on color additive legislation. Incidentally, the opening of the hearings nearly coincided with the PMA appearance before the senate subcommittee on antitrust and monopoly.

State Legislation — We have been through the heavy state legislation year and have passed the first quarter of the light legislation year—hundreds of bills have been reviewed for possible adverse effects on our industry, and written protests and personal appearances have been made when required.

* * *

Already in this light legislation year, and spurred obviously by the congressional investigation of the drug industry, bills have been introduced in Massachusetts, New York and Rhode Island to establish state committees to investigate drug prices, patent practices, etc. Two are still pending.

Federal Legislation—For a good many years it has not been necessary for the pharmaceutical industry to be concerned with more than several bills in each congress. This eighty-sixth congress appears to be an outstanding exception.

Karsten Bill (HR 329) known as the Narcotics Manufacturing Act of 1960 (see previous annual report for analysis)—Legal representatives of the board of directors' Karsten bill committee met on several occasions and drafted two amendments to the bill and a suggested statement to be included in the congressional report, specifically stating that it was not the congressional intent or treaty obligation to include barbiturates, amphetamines, tranquilizers, etc., under narcotic regulations. The amendments relate to enlargement of the commissioner's powers to exempt certain narcotics.

At a meeting with the commissioner and his staff, these were presented, received favorably, and have been incorporated substantially in the proposed legislation and committee report. The bill has passed the house in the first session and, in the second, the senate finance committee has approved the bill as it passed the house and has placed it on the senate calendar of bills ready for immediate consideration. Only the current civil rights debate in the senate appears to be blocking senate passage.

* * *

Hazardous Substances Bill (Magnuson-Bush, S 1283; Roberts, HR 5260).—To date, we have been confining our activities in respect of this proposed legislation to conferences with FDA officials in company with representatives of the Proprietary Association in an effort to obtain agreement of FDA to changes in proposed new section 502(f) contained in title II of the bill. The PMA has approved title I which is backed by American Medical Association and Chemical Specialties Manufacturers Association and relates principally to household chemicals.

However, the amendment to section 502(f) of the food, drug and cosmetic act, proposed by FDA, in our opinion, will undoubtedly lead to more onerous bureaucratic regulations and more extensive product liability—unless, of course, we can come to a compromise amendment, eliminating most of our objections. As of the date of this report, the senate has reported this bill out without title II and the house interstate and foreign commerce committee is holding hearings on the bill.

Despite the mild comments of the Sec-

PMA ADMINISTRATIVE VICE-PRESIDENT: Dr. J. O'Neill Closs, who is the administrative vice-president of the Pharmaceutical Manufacturers Association.

PMA Meeting Report

PMA TREASURER: S. Barksdale Penick, Jr., president of S. B. Penick & Co., New York, who has been re-elected treasurer of the Pharmaceutical Manufacturers Association.

retary of HEW at his recent press conference, it is believed that the FDA will vigorously endeavor to have the house committee restore title II, including the portions of the proposed new section 502(f) to which we object.

Color Additives Bills (Hill-Goldwater, S 2197, and Harris, HR 7624).—Meetings between representatives of the pharmaceutical contact and law sections and with representatives of the FDA were held in an effort to obtain the latter's approval to certain changes in these bills and, in particular, in respect of the so-called Delaney clause.

We prepared a detailed statement suggesting specific amendments to these bills and presented it before a meeting of the house interstate and foreign commerce committee. Through the courtesy of Eli Lilly & Co., Edward Brown Williams, Washington attorney also presented a very able statement on behalf of PMA.

Dr. Thomas Carney, vice-president of Lilly and also chairman of the special board committee to study carcinogens, presented a most effective statement which resulted in the first public admission by chairman Harris that perhaps the Delaney clause is too tight and arbitrary.

Despite heavy political and scientific opposition, it is hoped that the special panel created by the committee may recommend a Delaney clause amendment, applicable both to the food additive and color additive bills, which is substantially similar to the association proposal.

Drug Ledgers Looming Larger Than Wonders

The president of a small drug making company told the Pharmaceutical Manufacturers Association that "the balance on the pharmaceutical industry's ledgers looms more largely in the public eye than the physiologic wonders our products work and for which mankind has waited since time began."

William C. Conner of Alcon Laboratories, Ft. Worth, Tex., let the prescription drug makers know that they "no longer toil in blissful anonymity."

In a reference to the current senate investigation of the pharmaceutical houses, Mr. Conner said that "whatever further action—on the legislative scene or elsewhere—comes out of the investigation, the smaller segments of this competitive, free-enterprise industry stand to suffer at least as much as the larger segments."

Pointing out that he spoke "as a representative of more than one thousand small companies," Mr. Conner called attention to the fact that nearly a third of the companies in the PMA membership do an annual business of less than $1 million.

He said there are many "A-B-C's" to be learned by the industry in presenting the factual record of its accomplishments in the public interest.

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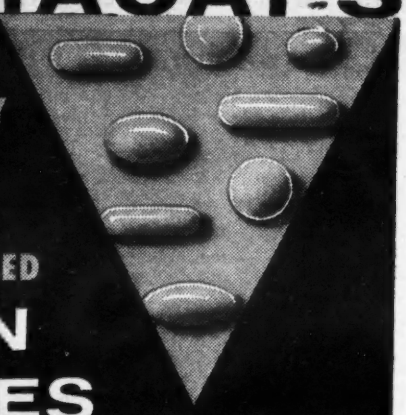

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Drugs, Fine Chemicals

Ascorbic acid (vitamin C) is now quoted at $7.35 a kilo for 100 kilos or more, 15 cents lower than the previous listing which held up for less than a week. In this highly competitive market, the chain reaction was not at all surprising. On top of adequate domestic production, there is a steady influx of foreign material which, despite expanding requirements for "C" in foods, beverages, and multi-vitamin preparations, has led to a continual downtrend in market prices. Even now, despite the two reductions, rumors persist that the $7.35 schedule is being shaded to snag a large order.

Thiamin (B_1) and pyridoxine hydrochloride (B_6) markets are also strictly competitive. Faced with the problem of cheaper foreign material, domestic makers have had no choice but to trade at lower prices. For thiamin, this means $25 to $27 per kilo, for pyridoxine $110 to $115—all-time lows.

Not all fine chemical prices are going down, however. Two manufacturers have issued new and higher schedules for bismuth salts, to be effective April 15. A third manufacturer was still mulling over the changes announced by competitors late last week but it appeared likely that the firm would take similar action shortly.

Recent medical and drug discoveries, it's said, have seen the bismuth salts replaced, at least partially, by other chemicals in several applications. Cutting into total sales volume, this has led to lower-level production and appreciably higher operating costs. To correct this disproportion, higher prices were found necessary.

To do business internationaly these days, the best way apparently is to construct overseas facilities. A leading US drug maker has just completed a new plant in Australia and will have two more, one in Brazil and one in Argentina, ready to go before the year is out. The firm is also planning facilities in India, Egypt, and Greece.

Another US drug firm is moving into Venezuela, joining with a manufacturer there to build a $700,000 pharmaceutical processing plant.

N-Acetyl-p-Aminophenol—Producers of this chemical are still at odds on prices. Against one maker's schedule of $1.30 a pound for 5,000 pound lots, others—longer in the business—are listing 1,000 pounds or more at $1.45.

Since this situation has prevailed for several weeks now, it is doubtful that either side will take further action on prices.

Ascorbic Acid—Price on 100-kilo lots of ascorbic acid is now $7.35 a kilo, down from the previous $7.50. The latter listing was in effect for about a week. Apparently, competition from cheaper imported material pressured this second reduction even as it did the first.

Downtrend in prices from official list, still $10 a kilo for large lots, does not, of course, reflect any decline in demand. In fact, all the trade point to the increasing quantities of "C" going into foods and beverages as well as into multi-vitamin preparations.

Bismuth Salts—Prices for several of the bismuth salts will be advanced April 15. Action is necessary reportedly if producers are to maintain a profitable operation. Dwindling pharmaceutical requirements for these chemicals, it's said, have upped production costs appreciably and the new schedules are designed to correct this inequity.

New prices are:

Bismuth nitrate, 250 pound drum, $2.25 per pound, formerly $2.08.

Bismuth subcarbonate, 150 (or 175) pound drum, $3.70 a pound, formerly $3.20.

Bismuth subgallate, 200 pound drum, $4.43 per pound, formerly $3.15.

Bismuth subnitrate, 200 pound drum, $3.15 per pound, formerly $2.65.

Bismuth subsalicylate, 100 pound drum, $4.25 per pound, formerly $3.50.

In readjusting schedules, prices for bismuth trioxide were dropped 2c. For a 100-pound drum, the quote as of April 15 will be $4.40 a pound, versus the current $4.42.

Prices for bismuth oxychloride ($4.42 per pound for a 25 pound drum) and bismuth-ammonium citrate ($4.22 a pound) will not be changed.

Bismuth nitrate is used in the preparation of the other bismuth salts. These, in turn, have a variety of medicinal uses.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	April 10, 1959
60.32	60.32*	60.35	60.85

* Revised.

For Current Prices See Page 11

The subcarbonate is used in the treatment of gastroenteritis, peptic ulcer and diarrhea; the subsalicylate is used as an antisyphilitic. Recent drug discoveries have, however, crowded the bismuth compounds for these applications.

Citric Acid—A relatively young chemical company will bring on stream its first citric acid plant within the next three weeks. And while soliciting customers for this production, the firm is completing plans for a second citric installation, this one to be built in Mexico in either Mexico City or Vera Cruz. The latter site, offering easy access to Latin American markets, has one drawback in that requisite supplies of sulfuric acid are not readily available. But this factor is minimized by a more important consideration. The firm hopes to export most of its Mexican output.

Although plans are not yet finalized, the firm says its projected plant will have a minimum annual capacity of 10 million pounds. Mexican interests are not participating in this venture, something of a phenomenon since the Mexican government usually requires same before it gives the green light to US firms to build new plants.

A leading US pharmaceutical manufacturer is also building a citric acid plant in Mexico. Plans completed, the firm has scheduled ground breaking ceremonies at the Cuernavaca site for today (April 11).

The firm will use some of its citric output captively and will sell the remainder on the open market; possibly export, as well.

Citric requirements in Mexico are said to be growing but a big, big market it isn't. Raw materials and labor are relatively cheap, however, and this seems to be enough of an incentive to entice US manufacturers south of the border.

Currently, overall US requirements for citric are increasing with the seasonal pick-up in demand from the beverage trade. Industrial applications are also taking more and more citric. Sources note the increasing quantities of the chemical being used for stainless steel equipment cleaning.

Cyclamates — Non-caloric sweeteners, sodium and calcium cyclamates have enjoyed a steadily expanding market due in part to the increasing numbers of waist-conscious Americans. Special dietetic foods also account for the increasing consumption of these chemicals. Supplies are fully adequate, prices firm at long established levels.

Monosodium Glutamate—Market for this food flavor enhancing agent is said to be expanding slowly but other than this report trade sources have nothing further to say. Supplies, of course, are fully adequate, prices unchanged. One maker quotes at $1 a pound for any quantity, delivered, while a second quotes at $1.15 a pound for a 100 pound order. The latter uses a considerable part of its production captively in the manufacture of a product marketed through food stores.

Narcotics—The Bureau of Narcotics of the Treasury department has advised manufacturers of narcotic drugs that "all returns accounting for the manufacture and distribution of narcotic drugs rendered after January 1, 1961, will be required to report quantities in terms of the metric system rather than the avoirdupois system of weights." The changeover may be made by any manufacturer whenever ready, the bureau says.

Narcotics accounting by the metric system was first proposed by the bureau in

—*Continued on page* 65

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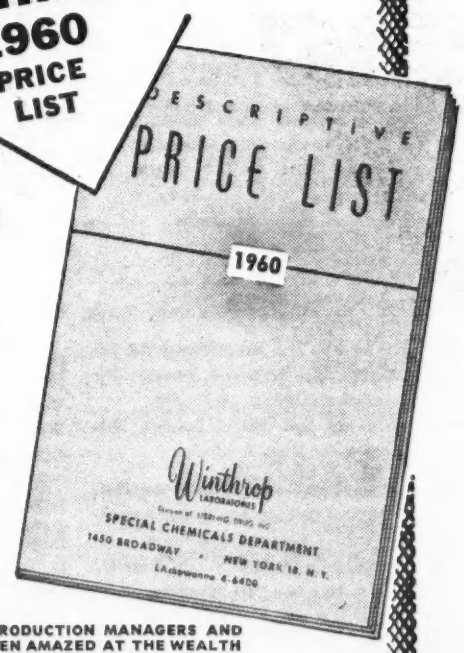

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1,600 bgs, N H Weitzner, Antwerp

CALCIUM PHOSPHATE, DIBASIC—2,204 bgs, Wessel Duval & Co, Antwerp

CAMPHOR OIL—20 dms, N Albert & Co, Yokohama

CARAWAY SEED—300 bgs, Nieman Bros, Rotterdam
250 bgs, R J Spitz, Rotterdam

CARBON, DECOLORIZING—60 dms, American Cyanamid Co, Bremen

CARDAMOM—22 cs, K H Landes & Co, Colombo

CARNAUBA WAX—131 bgs, S C Johnson & Co, Fortaleza
222 bgs, Morgan Guaranty Trust Co, Fortaleza
44 bgs, Cornelius Wax Refining Corp, Fortaleza
111 bgs, Elton Trading Corp, Salvador
296 bgs, N American Cocoa Trading Corp, Salvador
56 bgs, Biddle Sawyer Corp, Fortaleza
278 bgs, F Henjes, Fortaleza
588 bgs, Biddle Sawyer Corp, Parnahyba
163 bgs, Frank B Ross, Parnahyba
75 bgs, M Argueso & Co, Parnahyba
125 bgs, J W Hanson, Parnahyba
63 bgs, Strahl & Pitsch, Parnahyba
563 bgs, F Henjes, Parnahyba
99 bgs, M Argueso & Co, Fortaleza
56 bgs, Fortaleza
335 bgs, Areia Branca

CASEIN—287 bgs, F H Paul & Stein Bros, Oslo
60 bgs, Basic Food Materials, Rotterdam

CASHEWNUT SHELL LIQUID—127 dms, Durez Plastics, Cochin

CASSIA—77 bls, Rotterdam

CASTOR BEANS—690 bgs, Baker Castor Oil Co, Bania de Caraquez

CASTOR OIL—272 tons, Wallace & Tiernan, Calcutta
320 tons, Spencer Kellogg, Rotterdam
1,353 tons, Baker Castor Oil Co, Bombay

CELERY SEED—85 bgs, Kellys America Ltd, Bombay
170 bgs, Fritzsche Bros, Bombay
87 bgs, Louis Furth, Bombay
261 bgs, Otto Gerdau, Bombay

CHAMOMILE FLOWERS—9 cs, Bank of Montreal, Naples

CHESTNUT EXTRACT—1,100 bgs, Barkey Importing Co, Naples
2,200 bgs, Barkey Importing Co, Genoa

CHLORAL HYDRATE—11 dms, Hamburg

p-CHLORO-m-CRESOL—20 kgs, H A Gogarty, Liverpool

CLOVE—100 bgs, Max Van Pels, Tamatave
100 bgs, Delano Corp, Tamatave

COBALT OXIDE—240 cks, Antwerp

COCONUT OIL—215 tons, L A Ferm & Co, Rotterdam

CODLIVER OIL—6 dms, Carroll Dunham Smith Pharmacal Co, Hull

COPAIBA BALSAM—6 dms, Kline & Co, Manaus

COPPER CHLORIDE—10 bgs, Gallard Schlesinger, Marseille

COPPER CYANIDE—110 dms, International Chemical Corp, Hamburg

CORIANDER SEED—6,000 bgs, Louis Furth, Haifa

CORN STARCH—600 bgs, Geismar & Co, Bremen
4,410 bgs, Impex Agricultural Corp, Rijeka
340 bgs, Rotterdam

CREAM OF TARTAR—1,250 bgs, Leonhardt & Brush, London

CUTTLEFISH BONE—100 cs, D Young, Nagoya
120 cs, D Young, Yokohama

CYANOACETANIDE—70 cks, Havre

DAMMAR GUM—60 cs, S Winterbourne & Co, Bangkok
64 bgs, Chase Manhattan Bank, Singapore
28 bgs, Singapore

DECRAS—50 dms, Gallard Schlesinger, Bremen
12 dms, H Meeter Co, Rotterdam
4 dms, Olympic Shipping Co, Liverpool

DEXTRIN—360 bgs, Manufacturers Trust Co, Rotterdam

DICYANDIAMIDE—221 bgs, Industrial Chemical & Dye Co, Yokohama

DINITROBENZOL CHLORIDE — 2 kgs, Aceto Chemical Co, Liverpool

DIVI DIVI—1,125 Seroons Barkey Importing Co, Ciudad Trujillo

DYES, COALTAR—57 dms, Caldwell & Co, Hamburg
89 dms, Baird Chemical Corp, Hamburg
85 dms, Orlex Dyes & Chemical Corp, Hamburg
54 dms, H Bruckmann & Lorbacher, Hamburg
19 dms, Henley & Co, Hamburg
27 dms, American Dyewood Co, Antwerp
25 dms, Toms River Cincinnati Chemical Corp, Rotterdam

EUCALYPTOL—4 dms, F D Keller & Son, Alicante

FENNEL SEED—200 bgs, Rijeka

FISHLIVER OIL—20 dms, Mitsubishi International, Yokohama
10 dms, Kanematsu N Y Inc, Hamburg

FISHMEAL—4,000 bgs, Marine & Animal By Products Corp, Chimbote
4,404 bgs, Marine & Animal By Products Corp, Arica

FUEL OIL—104,993 bbls, Asiatic Petroleum Corp, Aruba
70,000 bbls, Garden State Refining Co, Pointa Pierre
122,052 bbls, Hess Inc, Punta Cardon
106,263 bbls, Central Petroleum Corp, San Lorenzo
101,345 bbls, Hess Inc, Bajo Grande
132,710 bbls, Hess Inc, Pointa Pierre
516,184 bbls, Humble Oil Co, Aruba
384,552 bbls, Humble Oil Co, Las Piedras
349,514 bbls, Humble Oil Co, Caripito

FURFURAL—892 tons, E I duPont de Nemours & Co, La Romana

GELATIN—56 dms, M Corbett & Co, Marseille
260 bls, United Hat Co, Leghorn
200 bgs, B Young, London
200 bgs, Franco Belgian Corp, London
200 bgs, Manhattan Adhesives Corp, Rotterdam
150 bgs, Manhattan Adhesives Corp, Hamburg
200 bgs, T M Duche & Sons, Antwerp
50 bgs, T M Duche & Sons, Rotterdam
660 bgs, Rotterdam
166 bgs, Hamburg
250 cks, Havre

GERANIUM OIL—1 dm, Roure-Dupont Inc, Tamatave
1 dm, Ufininio International Corp, Tamatave
4 dms, Fritzsche Bros, Tamatave
3 dms, J Manheimer, London
3 dms, A Chiris Co, Algiers

GINGER—160 bgs, East India Trading Co, Alleppey
80 bgs, K H Landes & Co, Alleppey
80 bgs, A G Dunn, Cochin
80 bgs, P H Petry, Cochin
160 bgs, C Czarinkow, Cochin
160 bgs, Cochin

GLUE—50 bgs, Jung Forwarding Co, Liverpool
116 cs, Henneux Co, Rotterdam

GLUE, BONE—500 bgs, Nicholson & Co, Durban
1,182 bgs, First National Boston, Rotterdam
700 bgs, First National Boston, Hamburg
338 bgs, Manufacturers Trust Co, Rijeka

GLYCERINE—200 dms, Chemical Bank, Cartagena
83 dms, R P Casado, Havana

GRAPHITE—500 bgs, C Pettinos, Tamatave
1,500 bgs, Joseph Dixon Crucible Co, Tamatave
250 bgs, Asbury Graphite Mills, Tamatave
250 bgs, Bankers Trust Co, Tamatave
250 bgs, Superior Graphite Co, Colombo
250 bgs, Asbury Graphite Mills, Colombo
900 bgs, Joseph Dixon Crucible Co, Bremen
250 bgs, National City Bank, Colombo
250 bgs, Colombo

GUAR GUM—1,854 bgs, Stein Hall & Co, Bombay
5,916 bgs, Mitchel Beck Co, Karachi
500 bgs, General Mills Inc, Karachi
200 bgs, T M Duche & Sons, Genoa

GYPSUM—400 bgs, C B Chrystal Co, Liverpool

GYPSUM, CRUDE—9,991 tons, U S Gypsum Co, Hantsport

HEXACHLOROETHANE—250 bgs, International Selling Corp, Marseille

HEXAMETHYLENEDIAMINE—1 dm, International Chemical Corp, Genoa

HOOF & HORNMEAL—667 bgs, Hollingshurst & Co, Recife

HORNMEAL—1,000 bgs, Transatlantic Animal By-Products Corp, Hamburg

HYDRAZINE HYDRATE—30 cans, E F Drew & Co, Rotterdam

HYDROXYCITRONELLAL—1 dm, Havre

IRON OXIDE—224 bgs, Landers Segal Color Co, Liverpool

KARAYA GUM—124 bgs, Tragacanth Importing Corp, Bombay
133 bgs, Stein Hall & Co, Bombay
67 bgs, Morningstar Paisley Inc, Bombay
61 bgs, T M Duche & Sons, Bombay
709 bgs, Colony Import & Export Corp, Bombay
615 bgs, Block Drug Co, Bombay

LACTIC ACID—50 dms, A Millner, Liverpool

LACTOSE—40 dms, Fallek Products Co, Rotterdam

LAVENDER OIL—16 dms, Marseille

LEMON OIL—1 dm, George Lueders & Co, Vera Cruz
1 dm, Felton Chemical Co, Vera Cruz
4 dms, Fritzsche Bros, Vera Cruz
3 dms, Ungerer & Co, Vera Cruz
100 cs, Messina

LEMONGRASS OIL—136 dms, Lo Curto & Funk, Cochin
17 dms, Maywood Chemical Works, Cochin
11 dms, Van Ameringen Haebler, Cochin
11 dms, John D Walsh Co, Cochin
6 dms, Polak Frutal Works, Cochin

LOCUST BEAN GUM—150 bgs, Nehls & O'Connell, Genoa

MAGNESIUM CARBONATE—200 bgs, Reheis Co, Liverpool

MAGNESIUM TRISILICATE—20 dms, Hudson Shipping Co, Liverpool

MANDARIN OIL—10 cs, National City Bank, Messina
20 cs, Messina

MARJORAM—112 bgs, H H Pike & Co, Ciudad Trujillo

MELAMINE—80 bgs, Maurbeni Iida Co, Yokohama
896 bgs, Liverpool

MENTHOL—11 dms, Chase Manhattan Bank, Marseille
20 cs, J Manheimer, Kobe
50 cs, J Manheimer, Muroran

MERCURIC OXIDE—50 cs, Lo Curto & Funk, Rijeka

MERCURY—100 flks, Associated Metals & Minerals Corp, Rijeka
150 flks, Leghorn Trading Co, Leghorn

METHYL AMMONIUM CHLORIDE—3 cs, Fischer Scientific Co, London

m-METHYL PIPECOLIC ACID—2,6-DIMETHYL ANILIDE—9 dms, Cook-Waite Lab, Gothenburg

MONOCRESYL GLYCERYL ETHER—8 dms, American Cyanamid Co, Liverpool

MONTAN WAX—50 bgs, G S Geigler & Co, Rotterdam

MUSTARD SEED—160 bgs, C Gulden, London

MYROBALANS—4,030 bgs, Chemical Bank, Visakhapatnam
1,845 bgs, Bank of N Y, Visakhapatnam

NAPHTHALENE—562 bgs, J N Forker, Hull
717 bgs, Witco Chemical Co, Hull

NAPHTHENIC ACID—90 dms, Imperial Oil Ltd, Barranquilla

NAPHTHOL—4 dms, H Bruckmann & Lorbacher, Bremen

o-NITROBENZOIC ACID—1 cs, Karr Ellis, Rotterdam

NUTMEG OIL—2 dms, A Chiris Co, Penang

OCOTEA CYMBARUM OIL—75 dms, American Metagraph Co, Itajai
45 dms, Lo Curto & Funk, Itajai
22 dms, Ernst Roth & Co, Itajai
22 dms, Givaudan Corp, Itajai

OLEYL CETYL ALCOHOL—26 dms, Olympic Shipping Co, Liverpool

OLIVE OIL—11 dms, C Sierros, Piraeus
187 dms, Atlantic Bank of N Y, Piraeus
25 dms, Old Monk Olive Oil Co, Marseille
50 dms, J Victory, Barcelona
25 dms, J Ossola, Genoa
135 dms, J Ossola, Alicante
24 dms, Asaro Bros, Alicante
48 dms, Bella Donna Packing Co, Alicante

OREGANUM OIL—3 bbls, Beirut

OURICURY WAX—200 bgs, M Schmidt, Salvador
166 bgs, United Commodities Corp, Salvador

PALM OIL—935 tons, Balfour Guthrie, Matadi
77 dms, Borden Co, Antwerp

PALMAROSA OIL—2 pots, A Verley & Co, Bombay

PALMKERNEL OIL—400 tons, E F Drew & Co, Matadi
195 tons, Capital City Products Co, Matadi
300 tons, Corn Products Co, Matadi

PAPAIN—50 cs, Empire Trust Co, Colombo
61 hf chts, V A Cordovi, Colombo

PAPRIKA—250 bgs, R T French, Alicante
75 bgs, Wm E Martin & Sons, Alicante
400 bgs, M Porazzi, Alicante
25 bgs, J H Elton, Alicante
65 bgs, Gallagher & Ascher, Alicante
100 bgs, Gel Spice Co, Hamburg
400 bgs, Woolson Spice Co, Hamburg
125 bgs, Van Loan & Co, Hamburg
100 bgs, H Marmorek & Son, Lisbon
350 bgs, A A Sayia, Alicante
200 bgs, Rijeka

PARAFFIN—18 bgs, Cornelius Wax Refining Corp, Hamburg

PATCHOULI OIL—10 dms, Grace National Bank, Penang
15 dms, Lo Curto & Funk, Penang
3 dms, Singapore
4 dms, Penang

PEATMOSS—1,700 bls, New Amsterdam Import Co, Bremen
2,000 bls, Premier Peatmoss Corp, Bremen
9,350 bls, E J Lang, Bremen
750 bls, Bruco Peatmoss Corp, Bremen
1,500 bls, Ascot Peatmoss Corp, Bremen
4,175 bls, Garden Supply Co, Bremen
2,000 bls, Marine Midland Trust Co, Bremen
999 bls, E Dunwoody, Bremen
3,810 bls, Premier Peatmoss Corp, Hamburg

PEPPER, BLACK—160 bgs, East India Trading Co, Colombo
80 bgs, A G Dunn, Colombo
160 bgs, Daarnhower & Co, Colombo
160 bgs, Reliable Mercantile Co, Cochin
240 bgs, Otto Gerdau, Cochin
480 bgs, East India Trading Co, Cochin
80 bgs, Daarnhower & Co, Cochin
80 bgs, K H Landes & Co, Cochin
160 bgs, A G Dunn, Cochin
160 bgs, Chase Manhattan Bank, Colombo
160 bgs, Kellys America Ltd, Cochin
160 bgs, Mutual Spice Co, Cochin
40 bgs, Wolmet Raw Products, Cochin
320 bgs, A G Dunn, Alleppey
560 bgs, Otto Gerdau, Alleppey
320 bgs, East India Trading Co, Alleppey
240 bgs, Atlanta Textile Corp, Cochin
480 bgs, Alleppey
800 bgs, Cochin
160 bgs, Colombo

PEPPER, RED—200 bgs, American Commerce Co, Yokohama
100 bgs, M J Golombeck, Kobe
100 bgs, A G Dunn, Kobe

PEPPER, WHITE—70 bgs, A G Dunn, Singapore
70 bgs, K H Landes & Co, Singapore
310 bgs, J F Frank, Singapore

PETITGRAIN OIL—6 dms, Swiss Credit Bank, Asuncion
34 dms, George Uhe Co, Asuncion
22 dms, Gillespie & Co, Asuncion
10 dms, Hollander Trading Corp, Asuncion
12 dms, Chase Manhattan Bank, Asuncion

PETROLEUM, CRUDE—101,341 bbls, California Oil Co, Bajo Grande
119,804 bbls, Humble Oil Co, San Lorenzo
325,873 bbls, Phillips Petroleum Co, La Salina
102,879 bbls, California Oil Co, Sidon

PETROLEUM, CRUDE—115,044 bbls, Mobil Oil Co, Puerto La Cruz
174,178 bbls, Hess Inc, Punta Cardon
195,738 bbls, Esso Standard Oil Co, Puerto La Cruz
88,320 bbls, Humble Oil Co, La Salina

POLLACKLIVER OIL—5 dms, Arista Oil Products Corp, Yokohama
75 dms, Mitsubishi International Corp, Yokohama

POLYETHYLENE—33 bgs, Goodrich Chemical Co, Bremen

POLYVINYL ACETATE EMULSION—20 bbls, Lloyd Associates, Bremen

POLYVINYL CHLORIDE—120 cs, Robeco Chemicals Inc, Yokohama
600 bgs, Venice

POLYVINYL CHLORIDE RESIN—2,000 bgs, General Wire & Cable Co, Yokohama
760 bgs, Mitsui & Co, Kobe

POPPYSEED—300 bgs, Levy & Levis Co, Rotterdam
450 bgs, M J Golombeck, Rotterdam
250 bgs, Izmir

POTASSIUM NITRATE—200 bgs, Tar Residuals Inc, Trieste

PRUSSIAN BLUE—60 dms, Smith Chemical & Color Co, Rotterdam

PSYLLIUM SEED, HUSKS—730 bgs, Biddle Sawyer Corp, Bombay
1,505 bgs, S B Penick & Co, Bombay

QUININE HYDROCHLORIDE—2 cs, Chas L Huisking & Co, Hamburg

QUININE SULFATE—20 dms, Lo Curto & Funk, Hamburg

RADIUM ELEMENT—1 cs, Radium Chemical Co, Antwerp

RICE STARCH—200 bgs, American Key Products, Trieste

ROSEMARY LEAVES—100 bls, Split

SAGE LEAVES—300 bgs, Trieste

SASSAFRAS OIL—23 dms, Manton Trading Corp, Itajai

SEEDLAC—1,000 bgs, C H Timm, Calcutta
800 bgs, Gillespie Rogers Pyatt, Calcutta
250 bgs, Wm Zinsser & Co, Calcutta

SESAME OIL—83 dms, I R Boody & Co, Copenhagen

SESAME SEED—100 bgs, Nieman Bros, Corinto
400 bgs, J Bieler, Corinto
400 bgs, Hismoco American Co, Corinto
200 bgs, C M Van Sillevoldt, Corinto
724 bgs, N American Continental Co, Corinto
3,090 bgs, Independent Halvah & Candies, Corinto
300 bgs, International Commodities Corp, Corinto
2,731 bgs, Louis Furth, Corinto

SESAME SEED, HULLED—600 bgs, Nieman Bros, Corinto
200 bgs, Ideal Trading Co, Corinto
200 bgs, M J Golombeck, Corinto
100 bgs, Sokol & Co, Corinto
150 bgs, R J Spitz, Corinto
500 bgs, Louis Furth, Corinto
700 bgs, Archibald & Kendall, Corinto
150 bgs, Levy & Levis Co, Corinto
200 bgs, C M Van Sillevoldt, Corinto

SHELLAC—200 bgs, Mantrose Corp, Bremen
150 bgs, Gillespie Rogers Pyatt, Calcutta
425 bgs, Colony Import & Export Corp, Calcutta
200 bgs, Wm Zinsser & Co, Calcutta

SODIUM BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool

SODIUM CYANIDE—800 dms, Chemical Manufacturing Co, Liverpool
610 dms, Philipp Bros Chemicals, Rotterdam

SODIUM CYCLAMATE—10 dms, D Hauser, Yokohama

SODIUM LAURYL SULFATE—182 bbls, Synthetic Fertilizer & Chemicals Inc, Antwerp

SODIUM PERBORATE—250 bgs, United Merchants Inc, Leghorn

SODIUM PERBORATE TETRAHYDRATE — 230 bgs, Riches Nelson, Antwerp

STEARINE PITCH—110 dms, G S Zeigler & Co, Hull

SULFUR, PRECIPITATED—10 cks, Lo Curto & Funk, Liverpool

TALC—21,230 bgs, Charles Mathieu, Genoa
800 bgs, Whittaker Clark & Daniels, Bordeaux

TAPIOCA FLOUR—400 bgs, Madagascar Agencies, Tamatave

TARTARIC ACID—1,110 bgs, Leonhardt & Brush, Barcelona
2,200 bgs, Leonhardt & Brush, San Feliu de Guixols

TERPINEOL—1 cs, F N S Corp, Havre

TOLU BALSAM—5 dms, Magnus Mabee & Reynard, Matias de Galvez

m-TOLUENEDIAMINE—10 dms, Aceto Chemical Co, Rotterdam

TONKA BEANS—27 cs, H Hollander & Co, Manaus

TRICHLOROETHYLENE—150 dms, Chemical Manufacturing Co, Liverpool
20 dms, Philipp Bros Chemicals, Haifa
20 dms, Erie Chemicals, Haifa
400 dms, International Selling Corp, Marseille

TURMERIC—240 bgs, Ludwig Mueller, Cochin
320 bgs, Kellys America Ltd, Alleppey
80 bgs, S B Penick & Co, Alleppey
80 bgs, A A Sayia, Alleppey
80 bgs, L E Ransom, Alleppey
240 bgs, Alleppey

ULTRAMARINE BLUE—540 bgs, Whittaker Clark & Daniels, Hull

UNDECYLENIC ACID—50 dms, International Selling Corp, Marseille

UREA—1,320 bgs, Cosmos Shipping Co, Yokohama

UREA, SYNTHETIC—3,987 bgs, Chemical Manufacturing Co, Liverpool

VANILLA BEANS—68 cs, Dammann & Co, Tamatave
69 cs, Madagascar Agencies, Tamatave
94 cs, Morningstar Paisley Inc, Tamatave
24 cs, American Food Lab, Tamatave
206 cs, Gillespie & Co, Tamatave
47 cs, L A Champon & Co, Tamatave
26 cs, First National Boston, Tamatave
23 cs, J Manheimer, Tamatave
127 cs, F Huber & Co, Tamatave
53 cs, F Huber & Co, Vera Cruz
11 cs, A Chiris Co, Tamatave
21 cs, Far Eastern Commodities, Tamatave
133 cs, George Uhe Co, Tamatave
121 cs, Lo Curto & Funk, Tamatave
85 cs, Tamatave

WITHERITE—224 tons, E I duPont de Nemours & Co, Middlesbrough

p-XYLOL—2 dms, Karr Ellis, Bremen

ZINC CHLORIDE—84 dms, Riches Nelson, Antwerp

ZINC OXIDE—700 bgs, Aceto Chemical Co, Liverpool
480 bgs, London

Philadelphia

ASBESTOS FIBER—600 bgs, Davies Turner & Co, Durban
5,080 bgs, Chas Kurz & Co, Lourenco Marques
2,100 bgs, Lourenco Marques

BONEMEAL—3,560 bgs, Fiula National Bank, Bombay

CASEIN—2,630 bgs, Pacific National Bank, Melbourne
260 bgs, National City Bank, Melbourne

CHESTNUT EXTRACT—800 bgs, Barkey Importing Co, Naples
500 bgs, Tannin Chemical Co, Marseille

CORN STARCH—672 bgs, Rotterdam

FISHLIVER OIL—10 dms, J H Faunce, Yokohama

FLUORSPAR—4,245 tons, Tampico

IRON OXIDE—4,415 bgs, American Chemicals Pigment Co, Malaga

OLIVE OIL—30 dms, National City Bank, Malaga

PAPRIKA—125 bgs, J Weinstein, Alicante

PEATMOSS—900 bls, E J Lang, Bremen
2,075 bls, Keer Maurer, Bremen
2,500 bls, Premier Peatmoss Corp, Gdynia
1,000 bls, Premier Peatmoss Corp, Bremen
1,500 bls, New Amsterdam Import Co, Bremen
2,849 bls, E Dunwoody, Bremen
500 bls, Schmidt Heiser Co, Bremen

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Drugs, Fine Chemicals

—Continued from page 63

September, 1946, almost fifteen years ago. The suggestion was renewed through trade association channels in March of 1949. It took the urgings of the Hoover commission, however, to set a target date of 1960 for its full adoption.

A list of drugs subject to federal narcotics laws has just been issued, superseding the list of February 13, 1959.

In Class A, or narcotic drugs fully controlled (require a written signed prescription) are: opium and its derivatives and compounds; phenanthrene opium alkaloids, their salts, derivatives and compounds; coca leaves, their alkaloids, derivatives, extracts or compounds; marihauna (not presently used for medicinal purposes in the US); pethidine (isonipecaine, meperidine, Demeraol, Dolantin); and opiates.

Penicillin—Much to the trade's satisfaction, penicillin prices have firmed up and the long downtrend halted. Potassium penicillin is being traded at $21 per billion units and procaine at $23 per billion units, prices in effect for several months. Demand is described as good.

Salicylic Acid — Producers of salicylic acid may stand to get some late spring and summer business over and above normal requirements. A leading tableter has announced that it will run a summertime promotion campaign for its brand of aspirin. The campaign, which will use the theme, "When you're feeling heatbeat . . ." is reported to have been successful during the past two years so it seems likely that it will convince the tired, weary public (it's not the heat, it's the humidity) to consume more and more aspirin this summer, as well. Of course, if it's a fresh, breezy summer—and wouldn't that be nice.

Streptomycin—Producers have dropped prices for streptomycin and dihydrostreptomycin sulfates $5 to $35 per kilo for 50-kilos or more and to $36 for lesser quantities. On all but the part of the initiator, the reduction was a competitive move.

Reports indicate that demand for these antibiotics, both domestically and abroad, has been routinely good since last fall. A tapering off is expected shortly, however.

Prices have been firm since last October when a leading manufacturer announced that it would not sell DHS and strep at less than the official schedule. This action prompted others in the trade to do likewise.

Botanicals

Supplies of some of the domestic botanicals are getting tight but dealers here figure that they'll have adequate material to fill requirements until new crops start coming in. This should be about mid-May, provided the weather is favorable for gathering. Collections have been impeded so far by the cold and rain.

Other years, reports on the domestic situation have always noted the decrease in the number of gatherers. Still a smaller force is expected this year. According to one view, this will not result in smaller collections of the larger volume and higher priced items.

In the past, it's said, collections of the less important materials have been smaller and, in fact, some of the rela-

—Continued on page 68

NOW OVER 5100 BIOS CHEMICALS

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- CALCIUM SUCRATE
- CALCIUM UNDECYLENATE
- CAMPHOQUINONE
- CAMPHOR SALICYLATE
- CAMPHYLAMINE
- CANTHARIDIN
- p-CARBAMYLPHENYLARSINE OXIDE
- CARBOXYBENZENESULFONIMIDE
- p-CARBOXYPHENYLARSINOXIDE
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- CARNAUBYL ALCOHOL

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Oil & Water Miscible (Mineral) Stable Powders
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Essential Oils, Aromatics

One decline and three advances showed up in the essential oils markets last week. Clove leaf oil dropped 5 cents per pound, Ceylon citronella advanced 10 cents per pound, patchouli advanced 40 cents per pound and Florida tangerine advanced 50 cents per pound. Firmness was noted in Puerto Rican bay, grapefruit, sandalwood, and white pepper. The petitgrain market is reported to be weakening.

From published information, it is learned that a well-known paint company has recently begun producing a group of pure aromatic chemicals from p'nene. They include: linalool, geraniol, citronellal, hydroxycitronellal, citronellol, citral and ionones and their derivatives.

At the Sixth Annual Open Symposium of the American Society of Perfumers to be held April 28 in New York at the Essex House, the following talks will be presented:

A Modern Approach to the Evaluation of Bergamot Oil, Fragrance and the American Male, The Influence of Human Temperament in Odor Selection, Pitfalls in Perfumery, Perfumers and Patents, and The Abstract Concept in Perfumery.

The following news is from the United States Department of Agriculture.

Aroma-bearing materials in meats, isolated recently by U. S. Department of Agriculture scientists, may eventually be used to enhance the flavor of certain meat cuts or to impart flavor to food concentrates being developed for space travel.

Only minute amounts of these flavor-producing compounds have been extracted from beef and pork. Their identification, however, may point the way to a process for flavoring algae which is being investigated by many researchers as a possible source of food and oxygen for travel in outer space.

Basic research by Irwin Hornstein and Patrick F. Crowe of the Agricultural Research Service's Eastern Utilization Research and Development Division at Beltsville, Md., showed the flavor-producing substances of lean beef or pork could be completely removed by extraction with cold water. When the extract was freeze-dried to a powder and heated, the rich aroma of roast meat was produced.

According to their studies, as reported last week at a meeting of the American Chemical Society, at Cleveland, Ohio, the "meaty" flavor of these and perhaps other meats comes from the compounds developed by cooking the lean portions of both meats. However, the compounds that provide distinctive flavor between beef and pork are found in the fatty portions. Although the materials from the fat of both meats were roughly similar, the amounts and proportions of the different compounds varied widely.

When heated to the boiling point of water, the aroma-bearing compounds from beef fat smelled like "apples" or "deep-fat-fried," and those from pork fat smelled like "cheese" or "fried bacon."

Preliminary studies indicate that the flavor precursors—the substances in raw meat that give rise to flavor-producing compounds when the meat is cooked—are primarily low-molecular-weight polypeptides, carbohydrates, and amino acids. It is believed the flavors are produced by the interaction of these compounds and not by any one alone.

Price Trends

Advanced

Citronella, Ceylon, 10c. per lb.
Patchouli, 40c. per lb.
Tangerine, 50c. per lb.

Reduced

Clove leaf, 5c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
147.02	146.89	146.61	146.19

For Current Prices See Page 11

Essential Oils

Bay—Reports continue to come in saying that the market for the NF Puerto Rican, 50-55 percent material is firming. The OPD range continues between $2.40 and $2.70 per pound.

Citronella—News from source is that the market is extremely tight. On spot, the Ceylon material advanced from $1 per pound to $1.10 per pound with many dealers asking $1.15 per pound for their material. Spot stocks are reported to be in light supply.

The Provincial Department of Agriculture and Forestry of Formosa has announced that citronella oil from Formosa, listed in the Oil, Paint and Drug reporter as Java-type, was exported in 1959 at the rate of 5 million pounds. This, the Department said, is an increase of about 550,000 pounds over the amount of oil exported in 1958.

The Department announced a production target of 1,350 metric tons of citronella oil for the year, 1960.

Formosa citronella has witnessed no price rises since mid-January. It remains at 85c. per pound.

Clove Leaf—After a long period of inactivity, price-wise, clove leaf oil is beginning to attract attention. Reports from essential oil dealers here in the New York area indicate that the market is weakening.

From its previous low, $1.35 per pound, the crude material in drums has come down to $1.30 per pound. Dealers report that prices at source are considerably lower than they have been for some months and that they feel this source situation will soon be more apparent on spot.

It was slightly over a year ago that the clove oils saw such drastic price advances. Late in March, 1959, reports were received here that tornadoes had struck the island of Madagascar, the chief supplying region, and that high winds, lashing rains and floods severely had damaged the crops as well as the stores of material that had already been harvested.

Prices fluctuated rather drastically following the floods and according to the OPD 1960 Hi-Lo Chemical Price Issue, the highest the leaf oil went during 1959 was $1.55 per pound.

The same weather conditions affect the bud oil as well as the leaf oil; therefore, the same economic conditions usually prevail for the two, but as yet, we have received no word of weakening in the bud oil market.

Grapefruit—The range is between $2.50 and $2.75 per pound with reports continuing to come in that the market is very firm. A smaller-than-normal crop and a marked increase in demand are said to be responsible for the tight supply situations. Little material is said to be available on spot or in the producing areas.

Orange—No price changes were noted last week among the orange oils.

The following statistics were compiled by the United States Department of Agriculture, Agricultural Marketing division, in its Statistical Summary.

The season's orange crop which is some 133 million boxes, is up about 3 percent from last season. This estimate includes 68.2 million boxes of early, midseason and navel oranges and 64.4 million boxes of Valencias.

Almost half of the orange crop had been harvested by March 1, the report stated.

Patchouli—Rather suddenly, the price jumped from $5.10 per pound to $5.50 per pound. It was suggested by a reliable news source that good buying interest locally is responsible for the price hike.

Peppermint—Prices continue at their previous levels, which are: natural, $4 to $4.60 per pound and redistilled, $4.25 to $5.25 per pound.

Petitgrain—A report from a reliable news source indicates that prices are a bit easier for shipment of petigrain oil. This, the news source explained, is a bit unusual since now is the winter season in the South American producing areas and traditionally the time for a firm market.

On spot, prices remain at their previous range, which is between $2.50 and $3.20 per pound for material in cans and drums.

Sandalwood—The oil continues extremely strong. The OPD range, however, remains at its previous level, $17.50 to $18.75 per pound.

Spearmint—Reliable news sources report that, instead of the almost unbelievably tight supply situation that has ex-

(Left in picture: Arthur H. Downey, MM&R Director of Research and Technology.)

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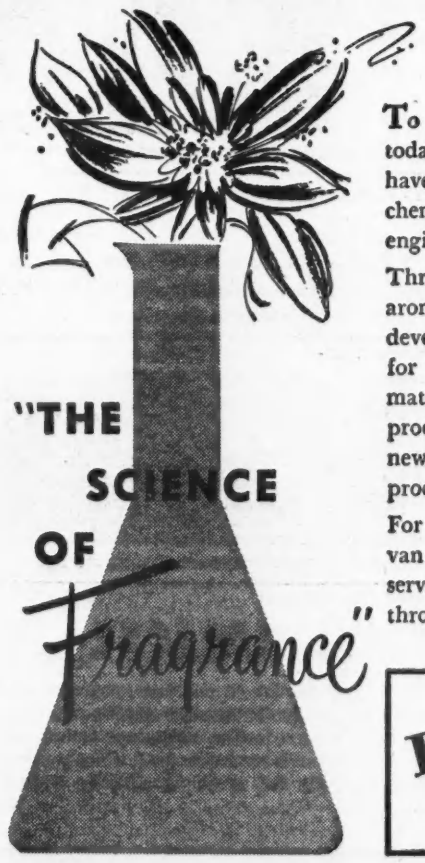

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Essential Oils

isted in spearmint oil since September, there are a few parcels of material available at the producing areas.

This is the first real hint that the market may be weakening since the spectacular price rise began last fell. Just prior to harvesting time, the price was a bargain-level $4.50 per pound whereas now it is exactly twice that price. (The news of slight market weakening was not accompanied by news of a price cut, however.)

Even though the low of the OPD range has slung tenaciously to the $9 level since the first week in December, dealers and brokers alike have been at a loss to explain the reasons why.

Lately the idea has been put forth that perhaps at the very low $4.50 level, the major consumers "spoke for" large quantities of material. This took a substantial portion of the oil out of circulation, thus making it difficult for smaller users to get their hands on material.

And, even though the crop was reported to be unusually large, the market began to take on the characteristics of tightness.

Incidentally, back in August, the Department of Agriculture released figures indicating that, according to official estimates, the 1959 crop would be some 34 percent more than the previous year's crop and 11 percent more than the average year's crop.

Tangerine—A 50c. per pound rise in the price of tangerine oil indicates how strong the market is. From its previous low, $3.75 per pound, the price has risen to $4.25 per pound.

Seeds and Spices

Cassia—There is some buying interest, dealers report, and prices remain unchanged.

Cloves—Prices are at the low of the year, it is said.

Celery—Market strength is noted.

Pepper—Black pepper prices are behaving erratically, but white seems to be moving steadily upward. At the last calculation, Muntok white pepper was 92c. per pound which represents a 5c. per pound advance over the previous quotation.

Black was reported to have been strong since the previous issue of OPD, but then to have weakened As of last week, black pepper was selling for 57½c. per pound—a half cent per pound decline since the previous level.

From the New York Produce Exchange, we learn that trading in black pepper futures resumed last week for the first time since before World War II.

The first delivery month will be July, 1960, and trading will be permitted in that month and any succeeding 17 months as determined by trade practices.

According to the Exchange, the contract unit will be 10 long tons or 22,400 pounds and price fluctuations will be 1-100th of a cent per pound or the equivalent of $2.24 per pound.

Minimum margins fixed by the New York Produce Exchange Clearing Association are as follows: When contract price is 59.99 cents a pound or below, $1,500; when 60 to 64.90 cents, $1,750, and when 65 to 70 cents a pound, $2,000.

With the beginning of trading, this market became only black pepper futures market in the Western Hemisphere. The only other pepper futures market is in Cochin.

Trading was discontinued in the early 1940's because the war made it impossible to move supplies from the producing areas. The old contract called for delivery of 15 tons.

Drugs, Fine Chemicals

—*Continued from page 65*

tively unimportant items—100 pounds a year may have been required—have not been collected at all. This is expected to be the trend once again.

Catnip—Supplies of catnip leaves are on the short side, prices firm.

Elm Bark—In the face of good interest, supplies are short, a combination of factors that makes for strong prices. New crop will be coming in within the next few months, provided the weather is generally favorable for collections.

Gum Arabic—According to one report last week, prices for amber sorts have gone slightly lower. Large lots, it's said, were being traded at 23c. a pound. This reflected the increasing amounts of material arriving here from the Sudan.

Gum Locust Bean—Interest is reported quiet with the result that the price has been dropped from the previous 38c.-40c. range to about 35c. a pound. Supplies were said to be fully adequate.

Gum Myrrh—Current listing is 65c. to 75c. a pound, about 10 cents higher than that quoted in mid-February. Demand is said to be routine.

Carbide Adds to Its Line Of Water-Soluble Resins

A quick-dissolving, water-soluble resin, "Cellosize" hydroxyethyl cellulose "QP-4400," is now available commercially from Union Carbide Chemicals Company.

The new grade of hydroxyethyl cellulose can be stirred into water almost as easily as sugar. There is no agglomeration as is the case when other water-soluble resins are stirred into water, the New York company says.

"Cellosize QP-4400" is a non-ionic thickener compatible with anionics, cationics and nonionics. It is reportedly an efficient protective colloid and stabilizer, and has a high tolerance for electrolytes. In water, the material is non-gelling even at the boiling point of the solution. It has high thickening action, even in low concentrations, and is low foaming in water solutions, Carbide adds.

US Lead, Zinc People

—*Continued from page 5*

so that the metals can regain some of the ground lost since 1955.

Mr. Hendricks, executive vice-president of consolidated Mining & Smelting Company of Canada, Ltd., gave his address at last week's joint meeting of the two associations, in St. Louis, Mo.

High tariffs, quotas and other restrictions on lead and zinc trade, though protecting domestic prices, work to the detriment of the industry by driving consumers to use substitute materials says the Canadian executive.

Being too high in the first place, protected prices imperil the long range health of the industry he feels.

The United States, he reminds his audience, is unable to meet its own needs from domestic ores and so is compelled to import. Thus, "There is much traffic in lead and zinc . . . and international cooperation is essential for the industry's well being."

Though troubled by the fact that even the most generous estimates on lead and zinc consumption for 1960 find the market falling short of its 1955 peak, Mr. Hendricks is happy to note steady gains in international contacts.

He throws the full weight of his support behind the work now being done by the United Nations' Study Group on International Lead and Zinc.

Producers, he says, should get together on an international basis and frankly exchange ideas and discuss broad industry problems.

Pyrethrum Trade Interested

—*Continued from page 3*

when the disposal program started a number of years ago to offer excess supplies of the insecticide for sale in quantities that can be absorbed by the market without disrupting prices or normal channels of trade.

The amount of the new offering is more than twice that sold last August by General Services Administration but officials are confident it will cause no undue burden on the market.

As announced last year (OPD 11/2/59), the sale is being handled in the same manner as that of last August.

Sales will not be consummated until after April 24, however, since under the law, GSA must wait six months from the date an offer is announced before completing sale and transferring title to property being sold.

Lead and Zinc Interests

—*Continued from page 5*

some of the mining state members criticized these proposed rates as being too low.

The rates proposed by the two minority members of the commission were 2.1c. per pound on the lead content of lead ores, 3c. per pound on the lead content of lead bullion, 2c. per pound on the lead content of manufactured lead articles, 1.75c. per pound on the zinc content of zinc ores, zinc fume and zinc dross and skimmings, 2.5c. a pound on zinc slabs, and 1.8c. a pound on the zinc content of zinc articles.

Petroleum Derivatives

The chronic shortage of benzene continues without any reported improvement in its supply position. However, most producers feel that by the end of the summer, supplies of benzene may return to their pre-strike condition. By then it is entirely possible that some softness may exist in the benzene market. It would seem that it is feast or famine in regard to the aromatics. The market situation for xylene and toluene remains unfavorable for producers. Softening tendencies in the price structure of toluene supplies are far in excess of present demand. In both cases over-supply is an old story. Should benzene join the other related aromatics in their supply positions, producers will be faced with an abundance of aromatics with very few sources to siphon off the excess.

The daily average production of natural gas liquids in January was 10 percent above January, 1959, according to the Bureau of Mines. The daily average production of liquefied gases at refineries was 7 million gallons, a 14 percent increase over the figure reported for a year ago. The daily average demand increased 1 percent above a year ago. Stocks of liquefied gases totaled 744 million gallons, 247 million gallons greater than a year ago. Underground stocks of liquefied gases totaled 510 million gallons, an increase of 204 million gallons from a year ago. Ethane-ethylene production was 56 percent above that reported for January, 1959. Plant production of isopentane was 26,959,000 gallons in January of this year. Stocks for the same month estimated by the Bureau of Mines at 4,625,000 gallons at plants and terminals while 3,311,000 gallons were on hand at refineries. Deliveries from plants and terminals for use in gasoline amounted to 28,273,000 gallons.

Aromatic Solvents

Benzene—Trade sources report that it should be at least two months before any improvement will be apparent in the supply position in this aromatic solvent. Reflecting the tightness that has existed in this solvent over the last six months is the 6c. a gallon premium that spot benzene continues to attract for material moving on spot. The 40c. a gallon price has shown some softening over the last few weeks. This would seem to be the result of the increased efforts of producers to bring into balance the lack of proportion between supply and demand. Meanwhile, the contract price of 34c. a gallon remains in effect.

Toluene—In sharp contrast to the supply position of its related aromatic solvent, benzene, is the long supply situation of toluene. Producers feel that the general deteriorating market conditions of this solvent have reached rock bottom. Prices have hit the point where it is considered to permit only the barest margin of profit. Should they go any lower, producers contend that it would be plainly unprofitable to market. The reasons for this dismal state of affairs concerns the major source of toluene demand: aviation gasoline. The inroads of the kerosene powered jet engine have decreased demand for military and civilian aviation requirements. The result has been a backing up of supplies of toluene that has caused considerable trouble for producers. In one instance it is reported that a producer of toluene found the market so unattractive that he closed down his toluene operations and meets his toluene needs by taking advantage of the depressed market price. Lower prices would have no effect on demand since there is a limit to the quantity that can be consumed. Cutbacks in production are becoming an increasingly strong possibility, since there is a limit to the amount of toluene that can be let run into gasoline.

Xylene—According to trade sources there has been a gradual worsening in supplies and softening in prices progressively building up over the last two months. Supplies of xylene are more than adequate in all areas. Listings are unchanged from previous weeks.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
104.34	104.34	103.64	104.42

For Current Prices See Page 11

Aliphatic Solvents

Hexane—With the end of the crushing season approaching, the usual decline in vegetable oil extraction operations is anticipated. Hexane demand should drop correspondingly. Prices are unchanged from the 20c. a gallon (tankcars, New York and New Jersey) and the 16c. a gallon in Houston.

Mineral Spirits—Demand continues to be well sustained for both the odorless and regular mineral spirits. With the seasonal spurt in painting activities, calls for paint materials and solvents are usually at their greatest volume. However the adverse weather conditions has dampened the prospects for a banner springtime sales picture. Prices are at the same levels, unchanged over the last six months.

LPG's

The American Petroleum Institute estimates that the total production of LP gas was 361,600,000 gallons for the period, March 1-15. Output from refineries is reported to be 114,045,000 gallons. Exactly a year ago production of LP gas was at 337,863,000 gallons, while refineries turned out 106,200,000 gallons. In both cases production of LP gas showed gains over the figures reported for the first two weeks of March, 1959.

Matching the increases in production, stocks of LP gas also were up during this period. Inventories of LP gas, at plants, terminals and underground, are reported by the A.P.I. to be 503,387,000 gallons. This is an increase over the amount estimated for March 1-15 when stocks were 443,432,000 gallons. Stocks at refineries are reported to be 88,042,000 gallons, a small increase from the 85,112,000 gallons estimated by the A.P.I. at the end of the first two weeks of March, 1959.

Microcrystalline—Demand continues to be well sustained in this market. No changes are reported in conditions affecting the light colored microcrystallines. Food packaging demand remains brisk. Prices for petroleum, coating grades are 10c. to 11c. a pound, with laminating grades at the 11c. to 12c. a pound level.

Paraffin—Crude prices hold at 6.55c. a pound. Fully refined paraffin at various melting ranges are comparably quoted in tankcars at price levels of 7.65c. a pound. Domestic demand is steady with little change.

Miscellaneous

According to the Bureau of Mines, current reports of the industry for the week ended March 25, 1960 indicate a decrease in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 7,078,000 barrels, a decrease of 38,000 barrels from the preceding week. Daily average crude runs to stills of 7,945,000 barrels were 88,000 barrels above the preceding week, and 62,000 barrels below the week ended March 27, 1959. Runs of foreign crude amounted to 969,000 barrels daily, compared with 921,000 barrels in the preceding week. For the four-week period ending March 25, crude oil production averaged 7,099,000 barrels daily, and crude runs to stills averaged 7,877,000 barrels daily with runs of foreign crude averaging 959,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended March 26, totaled 257,581,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 255,866,000 barrels the preceding week, this represents an increase of 1,715,000 barrels comprising an increase of 1,821,000 barrels in stocks of domestic crude and a decrease of 106,000 barrels in stock of foreign crude.

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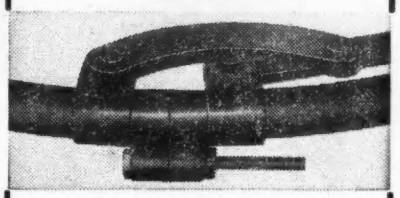

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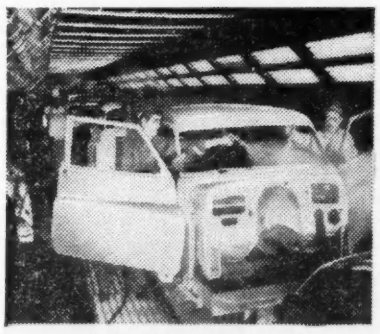

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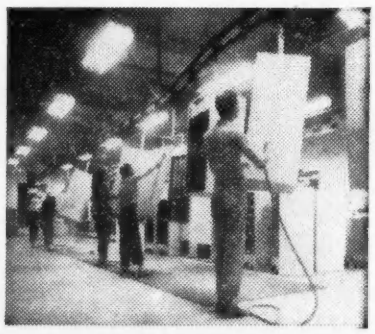

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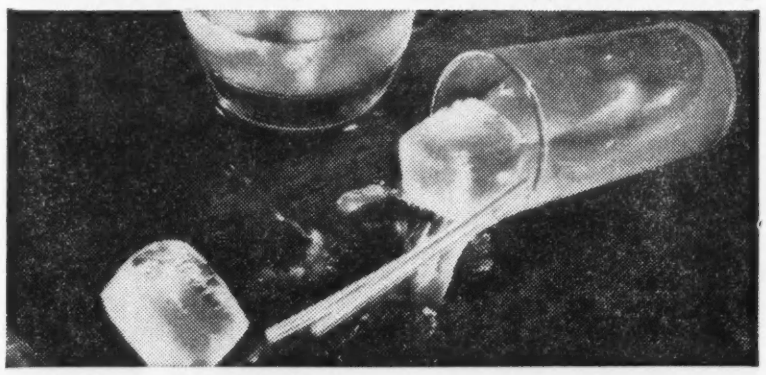

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Coatings Materials

The overall siuation in the coatings materials market is quiet and firm this week. Price increases are noted in the carbon blacks and in the bone blacks, but in general the prime pigments are reported to steady and routine. The possibility of a price increase in aluminum metal was raised when the president of a leading company mentioned it in his annual report. However, sources in the trade would not commit themselves as to when an advance in the price of the metal would be forthcoming.

In the plasticizer market,, supplies are reported to be getting somewhat snug. A shortage in the phthalate esters has been causing some difficulties for producers. Many in the trade feel that the supply position of the phthalate plasticizers may continue to be on the snug side for the remainder of the month. What the month of May will be like, is said to be up for grabs. Prices are reported to be firm at the old listings.

The price of Argentine casein slipped to 18¾ cents to 19 cents a pound under the pressure of stocks building up in the Argentine. Consumers are reported to be holding off, waiting developments on the European market. There, some of the countries are holding off buying until the end of the producing season in the Argentine, which is scheduled to end soon. Shipments are said to be moving freely.

Sales of shellac are moving well, according to trade sources. The Calcutta market is quiet and firm. The demand for orange shellac is reported to be only fair.

The Department of Agriculture reports that the Georgia-Florida market was firmer in price, while the supply position was strong. Stocks in dealers hands are quite limited, as adverse weather conditions throughout the month held production operations to near the lows of the winter season.

Price Trends

Advanced

Carbon blacks, 6c. to 8c. per lb.

Reduced

Casein, Argentine, ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 10, 1959
103.14	103.13	103.03	103.05

For Current Prices See Page 11

Prime Pigments

Aluminum Paste and Powder—Trade sources report that demand has hit its lowest point over the last few weeks. After a fine start at the beginning of the year, sales throughout the industry dipped to its lowest level. Speculation as to a possible price increase on aluminum metals was touched off a few weeks ago, when the president of a leading producer mentioned the possibility in his annual report to the stockholders. Last week, the trade would not confirm the possibility of an increase at this time.

Bone Black — A leading producer announced price increases on bone blacks last week. The new prices are: material in drums, l.c.l., freight allowed, 22.75c. to 24.25c. a pound while material in car lots is in the range of 20.75c. to 22.25c. a pound, works. The new prices went into effect on April 1. The increases affect only the lower ranges.

Carbon Blacks—A new price list for all carbon blacks was announced last week by one producer. Only one grade was changed in its price. Carbon black, pigment, high color, beads shipped in cartons had been 72c. a pound for car lots. The new price is 78c. a pound. For material in less than car lots the price went from 79c. a pound to 87c. a pound. Prices are in effect since April 1.

Chrome Colors—The Bureau of Census reports that the production of chrome oxide green (C.P.) was 489 short tons a decrease from the 525 short tons reported for December, 1959. In January, 1959 production was placed at 305 short tons. Stocks at producing plants were estimated at 651 short tons at the end of January, 1960. Stocks for the previous month were lower at 504 short tons.

Production figures for chrome yellow and orange (C.P.) are 1,910 short tons for January, 1960; 1,947 short tons for December, 1959 and 1,773 short tons for January, 1959. Stocks at the end of the same months are reported at: January, 1960, 2,961 short tons and December, 1959, 2,658 short tons.

For molybdate chrome organe (C.P.), production was set by the Bureau of Census at 675 short tons for January, 1960. During December, 1959 the output of this chrome color was 669 short tons, while in January, 1959 production was 507 short tons. Stocks were 891 short tons at the end of January, 1960 and 656 short tons at the end of December, 1959.

In comparing the total production of the chrome colors for 1959 with 1958, the output of the chrome colors was higher. In 1959, total production of chrome oxide green (C.P.) was 5,675 short tons, while in the previous year the amount produced was 4,820 short tons. Chrome orange and yellow (C.P.) totaled 26,159 short tons in 1959, compared to the 22,365 short tons produced in 1958. Molybdate chrome orange production in 1959 was 7,145 short tons, while in the previous year (1959) production totaled 5,675 short tons.

Lead Pigments—Activity continued to be routine this week. Sales hold at the same volume, prices are at the same listings, with very little prospect for any change in the next few weeks.

Titanium Dioxide—In a report by the Census Bureau, the production of titanium dioxide, composite and pure, was 495,082 short tons for 1959. During 1958, total production was set at 403,867 short tons. For the month of January of this year the output of titanium dioxide was 41,097 short tons, while production was 42,572 short tons during December, 1959. A year ago, the output of titanium dioxide was 41,532 short tons. Stocks were estimated at: 49,368 short tons for January, 1960 and 74,251 short tons for December, 1959.

Lacquer Materials

Nitrocellulose—Demand is reported to be well sustained over the last few weeks. Listings are unchanged from previous weeks, while supplies are said to be in good balance.

Plasticizers—Due to the shortage in the supplies of the phthalate esters, producers of the phthalate plasticizers are finding a corresponding pinch in the supplies of their material. Orders are being met but stocks are reported to be at very low levels. Prices are reported to be firm at the old listings.

Miscellaneous

Casein—Following the action of the congress to extend the suspension of the casein import duty another three months, (to July 1), the market took on a more relaxed attitude. Most trade men feel that the congress will approve the suspension of the duty for an additional three years. Casein men point to the statement of the acting Secretary of Agriculture as indicative of the attitude of the government. In his letter to the chairman of the Senate Finance Committee, Morse stated that since it is highly doubtful that the reimposition of the duty would materially aid the soybean industry, and in view of the United States' interest in getting other countries to lower their duties on our exports, he felt that the imposition of the duty would not be in our best interests.

On the other hand, the chairman of the Tariff Commission felt that isolated protein is interchangable in use with casein and that the lower price of the soya protein contributed to its attractiveness as a casein substitute.

It was learned from trade sources that at the hearings of the Finance Committee representatives of consumers of casein testified to the effect that soya protein was not in fact a suitable substitute for casein. On that basis, importers of casein feel that congress will approve the extension of the suspension of the import duty for another three years, until July, 1963.

Demand for Argentine casein was good last week. Prices for Argentine material was quoted at 18¾c. to 19c. a pound on shipments. The lower price was attributed to the huge stocks that have been building up in the Argentine over the last month. Also adding to the softening in the price structure of Argentine casein market is the report that some European countries might hold off their casein buy-

ing in an attempt to create a bullish price trend. Shipments from the Argentine are said to be moving well as the constricting affects of the dock strike wear off.

France may prove to be a possible additional source for casein should samples of the material prove to be satisfactory. The French, after a ten-year absence from the casein scene, are attempting a comeback for a portion of the world market. Only a few isolated shipments have been made; mostly to neighboring European countries. But the French, should they improve the quality of their product from what it was ten years ago, and provided their government grants them an attractive subsidy, might gain enterance as a major competitor on the world casein market.

On the New Zealand market offers were few and prices firm. A few offers of Australian casein were made for May-June shipment, and again prices are unchanged.

Natural Resins

Shellac—Trade sources report that the Calcutta market is quiet and firm this week. Prices are unchanged. Sales are moving at good volume and on a even keel. Demand for orange shellac has apparently hit a few snags and is reported to be not going well in all departments.

Naval Stores

Pine Gum—For the week ended April 1, the average price per standard barrel of commercial crude pine gum was $34.10 The weekly weighted aveage for turpentine was 51 2/10c. a gallon. Receipts of 800 barrels for the week were reported to be 1,108 less than the same week last year.

The Department of Agriculture reports that the Georgia-Florida market displayed firmer price tendencies in practically all categories of trading during the last month of the 1959-60 crop and the over-all supply position closed strong. Stocks in dealers hands became quite limited; the usual reserve of CCC-owned or controlled stocks have previously ceased to exist and unfavorable weather throughout the month has held production operations to near the lows of the winter season. Greater export inquiry developed for future months, especially for pale grades, and a fair volume of commitments have been made for June-September period at relatively firm prices. Announcements of price advances for other rosins for the first quarter of the new season were made in line with the over-all tight supply and the continuation of active demands.

The weighted average price for all grades on 3,828 drums, f.o.b. plants was $12.60 compared with $12.53 for the previous month and $8.75 for March 1959. Total reported sales volume of 10,612 drum equivalents was 1,318 more than last month and 4,330 more than during March 1959. Reported export sales of 4,807 drums were 165 more than last month and 2,247 more than during March 1959. Domestic sales of drums (994 WW, 1,300 WG, 650 N, 440 M, 344 K, 1000 G or better) constituted 36.1 percent of the total reported, bags 2.3 percent, tank cars rosin 16.3 percent, exports 45.3 percent.

Gum Turpentine—The supply position of turpentine at fully to more than ample was abount unchanged and the average price in tank cars dropped 1.6c. Competition from Russia and from a few European sources is reported to be keen. Bulk commitments for early export shipment totaled 250 tons. Total March reported sales was 73.510 gallons, 21.1 percent exports, compared with the 84,040 gallons last month and 212,630 gallons for March of last year.

ATFA Corp. continued to invite bids for 220,753 gallons from its Redemption Pool with consideration subject to prescribed minimum price. No purchases are reported.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. April 1	Mon. April 4	Tues. April 5	Wed. April 6	Thurs. April 7
Drums—					
WG	...	$12.95	$13.10	...	...
WW	...	...	...	$13.00	...
Bags—					
K	...	...	...	...	$12.25

Tankcars (for week ended April 8)—

Sales, USDA	2‡	2‡	1‡	1,316*	4‡

New York

(Per 100 lbs., c.l., Friday)

K-M, $13.50; N, $13.85; WG, $14.00; WW, 14.50

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.51	50.5	50 8/10¢	...	...
Sales	6.000	8.000	18.000	...	...

* Drums equivalent. ‡ Carlots. § Average price.

Oxygen Breaks Tabooed

—*Continued from page 7*

company states that "nothing could be further from the actual truth."

Just in case there should be any doubt about it, Linde has dug out for benefit of over-eager popularizers its official letter of release to distributors and salesmen, dated September 25, 1959.

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Monsanto Has Plans

—*Continued from page 5*

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Oils, Fats and Waxes

Trading in oils and fats last week continued spotty and restricted to prompt requirements. Cottonseed oil was firmer because of strength of crude oil, which advanced ¼ cent per pound. This firmness was reflected in the futures market especially for nearby delivery. Corn and soybean oils were easier and lower, while scarcity of peanut oil resulted in sales at 1 cent advance. Crude coconut oil was weak and shipments dropped ¼ cent per pound on the Pacific coast, while the New York was unchanged and more or less nominal. Lard was firm and slightly higher.

Increased demand for tallow and greases further stiffened the market. ¼ cent per pound, depending upon quantity. Dealers and exporters made the bulk of the purchases, with soapers operating sparingly.

Linseed oil was lower, as a result of continued slow demand. Crushers reduced the price schedule ½ cent per pound. Oiticica oil appeared steadier, following trading at a decline of ¼ cent per pound. Business of late has been heavy and sellers were showing less inclination to shade prices than heretofore. Tung oil was quiet, but firm reflecting the scarcity of oil for shipment from the Argentine. Trading in Brazilian castor oil was limited, but the market held steady because of the higher cost of oil from India. Rapeseed oil was firmer and quotations were raised fractionally. Soybean meal was less active and quotations were easier, declining $1 per ton. Linseed meal was scarce and stronger up $2 per ton.

Price Trends

Advanced

Carnauba wax, Ceara crude, 4c. per lb.
Refd., 6c. per lb.
Parnahyba, crude, 4c. per lb.
Refd., 6c. per lb.
Cocoa butter, 1c. per lb.
Cottonseed oil, crude, ¼c. per lb.
Refd., ½c. per lb.
Greases, ½c. per lb.
Lard, cash, ¼c. per lb.
Linseed meal, $2 per ton.
Peanut crude oil, 1c. per lb.
Refd., 1c. per lb.
Rapeseed oil, ¼c. per lb.
Tallow, edible, ¼c. per lb.
Inedible, ¼c. per lb.

Reduced

Coconut oil, crude, Pacific coast, ¾c. per lb.
Copra, $10 per ton.
Corn oil, crude, ½c. per lb.
Refd., ¼c. per lb.
Linseed oil, ½c. per lb.
Oiticica oil, ¼c. per lb.
Soybean meal, $1 per ton.
Soybean oil, crude, ½c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100 = 1949 average)

Last week	Prev. week	Last month	April 10, 1959
114.85	114.65	113.59	115.24

For Current Prices See Page 11

Vegetable Oils

Castor—Steadier undertone prevailed in imported oil due to higher cost of Indian oil. No. 1 Brazilian was held at 17¾c. per pound, tankcars, New York, prompt and later shipment. Business continued spotty for both domestic and imported grades.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	103.500	3.880.000
Previous week	.....	1.000.000
Corresponding week, 1959	1.270.500	1.460.000
Total this year	1.502.100	23.110.000
Corresponding period, 1959	9.090.100	24.110.000

Coconut—Trading was slow. Crude was lower for prompt shipment. Tankcars were quoted at 16c. per pound, f.o.b. Pacific coast, first half April; and 15¾c. second half. At New York, tankcars were offered at 18c., prompt delivery. Bulk oil was nominal at 17c., c.i.f. New York.

Corn—Crude was lower, with trading at 14c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil declined to 17.75c., tankcars, New York basis.

Cottonseed — Futures remained on steady basis closing slightly higher on the New York Produce Exchange last week. Trading was active. Crude oil was stronger and in good demand from refiners and for export with trading at ¼c. higher.

Trade interest continued to absorb May delivery, which served keep that month firmer than deferred. Cash oil was firmer. Refined salad was higher at 13⅛c. per pound, tankcars, New York, prompt delivery.

Israel purchased 1,800 tons of cottonseed oil and sought an additional 1,000 tons. Poland was authorized to purchase 7,000 metric tons of cottonseed or soybean oil. Contracts dates were from April 13 and June 30 and shipments to July 30.

Crude cottonseed oil was higher with sales reported at 10⅛c. to 10¼c. per pound, tankcars in the southeast; 10c. bid in the Valley; 10c., Waco and 9¾c., Lubbock.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, April 8, follow:

	Sales	High	Low	Close
		Cents per Pound		
May	342	12.10	11.93	12.09S
July	617	12.18	12.04	12.14S
Sept.	90	12.00	11.83	11.94S
Oct.	111	11.86	11.70	11.85S
Dec.	28	11.80	11.65	11.77S
March	5	11.61	11.75	11.80S
July (1961)	4	11.90	11.84	11.87@11.95

Total sales and switches, 1,207 contracts.

Linseed—Market was easier and prices were reduced ½c. per pound. Rain oil was cut to 13c. per pound, tankcars, Minneapolis, April-June delivery; 13.2c., July-September, same basis and 14.11c., f.o.b. New York, prompt delivery.

CCC sold 5 million pounds of raw linseed oil for export at 10.43c. and 10.455c. per pound, bulk, f.o.b. Minneapolis last week. This brings total sales to 32,779,000 pounds since February 18.

Oiticica—Users continued to show interest in replacements. Trading of late has been heavy on a scale downward. Steadier undertone has developed in this market and prices appear to have reached the low point. Business was reported last week on the basis of 14¼c. and 14½c. per pound, tankcars, New York, prompt and later delivery, accoridng to quantity.

Olive—Shipments from primary sources continued strong and recent price advances were closely maintained. Spanish oil was held at $54 per 100 kilos, drums, f.o.b. ports for April-May shipment and $56 for June-July, same basis. Trading of late for shipment from that source has been chiefly for European account, while demand from US buyers has been light and spotty. Greek oil also was steady and quoted at $58 to $60 per 100 kilos, c. and f. New York, while Tunisian was nominal at $60 to $61, same basis. Demand for oil on spot was limited with sales reported from $2.30 to $2.40 per gallon, drums, duty paid, as to seller and quantity.

Palm—Business was restricted to actual needs. Drums were unchanged ranging from 14c. to 15c. per pound, spot, depending upon quantity. Tankcars were offered at 11¾c., same basis.

Peanut—Tight supply situation still exists. Crude was higher, with sales made up to 17c. per pound, tankcars, f.o.b. mills. Refined oil was boosted to 20¼c. tankcars, New York basis.

Rapeseed — Prices were firmer and quoted at 13c. per pound, tankcars, New York, prompt delivery. Trading was light and spotty.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, April 8, follow:

	Sales	High	Low	Close
		Cents per Pound		
May	4	7.99	7.95	7.97@8.02
Sept.	4	8.03	8.01	8.07@8.10

Total sales and switches, 8 contracts.

Soybean—Crude was a shade easier and quoted at 8c. per pound, tankcars, f.o.b. Decatur, unrestricted, April-May shipment. Refined salad was quoted at 10.10c. to 10.15c. per pound, tankcars, New York, prompt delivery.

Spain bought 80,000 tons of degummed soybean oil for April-May shipment on Monday. This cleans up purchases authorized last season.

Tung—This market remained firm and

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Oils, Fats and Waxes

offers were light and closely held at 21⅞c. per pound, tankcars, New York, prompt delivery, according to seller. The market reflected the strength of the Argentine market.

Miscellaneous

Cocoa Butter—Market was stronger, advancing 1c. to 56½c. to 61c. per pound, spot, according to quantity.

Copra—Shipments were easier and off $10 per ton. Prompt shipment was quoted at $212.50 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases — Improved trading strengthened the market. Sales took place from ⅛c. to ¼c. per pound higher. Offers were still scarce. Yellow grease was moved at 5⅞c.-6c. per pound, tankcars, delivered, as to acid. Choice white was higher at 7c. to 7⅛c., same basis.

Lard—Market was irregular but closed higher. Cash lard was raised to 9.42c. per pound, drums, Chicago.

Tallow — Increased demand combined with light offers stiffened this market. Trading was quite active for dealer and export account, while soapers showing limited interest in replacements. Bleachable fancy was advanced to 6⅛c. to 6¼c. per pound, tankcars, delivered, with trading at that level. Prime was firmer at 6c.; special, 5⅞c., No. 1, 5¾c. and guaranteed fancy, 6½c., same basis. Edible tallow also was higher at 8¾c., same basis.

Fish Oils

Cod—Trading was moderate. Shipments remained steady at 7¼c. per pound, bulk, f.o.b. Gloucester, Mass. Offerings were light and closely held. Stocks on spot were quoted at 8½c. per pound, drums.

Menhaden — Business was still spotty and confined to actual needs. Export interest continued fair, while domestic inquiry was limited. Crude was unchanged at 6¾c. per pound, tankcars, f.o.b. works. Refined grades were unchanged. Light pressed was maintained at 10c. per pound, tankcars, prompt delivery.

Sperm—Norwegian whaling companies have reportedly sold 100,000 long tons of their 1959-60 Antarctic whale oil output, 40,000 tons to Norwegian processors and 60,000 tons to outside interests. The reported price was 9.06 cents per pound, according to the Foreign Agricultural Service.

The entire output of The Netherlands and the United Kingdom has been sold, and Japan has sold 60,000 to 70,000 tons.

Sperm whaling prior to the regular 1959-60 Antarctic season yielded 18,414 short tons of oil, excluding production of the Soviet Union for which no data are available. Comparable production last season was 34,563 tons, nearly twice as much. Sperm oil production in the Antarctic usually accounts for 40 to 50 percent of the annual world outturn and most of the world production.

Cake and Meal

Linseed Meal—Moderate quantities of linseed meal were sold for nearby delivery and lesser amounts for May-June. Prices were $2 higher. Formula feed business was active though hampered in some areas by flood conditions and poor roads. Withdrawals against old balances continued at good rate. Extracted meal, 34 percent was nominal at $58 a ton, bulk, in carlots, f.o.b., Minneapolis, for April delivery and $58.50 May-June.

Soybean Meal—Somewhat easier undertone developed in this market and prices slipped $1 a ton. Quick thaw over much of the consuming area has resulted in bad road conditions and slower movement of food. Most feed manufacturers have ample inventories, built up in recent activity. A plant or two in Iowa was shut down because of soybean shortage and difficulty obtaining supplies. Meal, 44 percent, was quoted at $57 a ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetable

Feature of the vegetable wax market last week was the sharp advance in the cost of carnauba wax replacements from Brazil because of heavy floods in the producing wax areas, which affected production and deliveries to the ports. The Brazilian government raised the floor price 4c. per pound, while shippers boosted quotations as much as 10c. per pound. This condition was reflected locally and under improved demand prices advanced 3c. to 4c. per pound. No. 3 Ceara crude was lifted to 73c. to 75c. per pound, and Parnahyba, 74c. to 76c. on the spot, depending upon quantity. Refined grades also was higher up 6c. per pound. Yellows were unchanged, but firmer. No. 1 Ceara was quoted at $1.05 to $1.07 per pound,

—*Continued on page 78*

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REACTORS — EVAPS — CONDS — TANKS

1—Condenser Service 650 gal. 304 S.S. closed Kettle, 5' x 4', with 100 sq. ft. bayonet heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—2000 gal. Struthers Wells 316 S.S. jacketed, agtd. Reactor.
2—3200 gal. 316 & 347 S.S., jacketed, agitated Kettles.
1—550 sq. ft. Buflovak, monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7' x 25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
1—4000 gal. Haveg Vert. Tank 8' x 12'.
1—4000 gal. 316 S.S. clad agitated reactor with coils.
1—1500 gal. Stainless Pressure Tank, 5' x 10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6" x 36', 200 psi.
6—Stainless Heat Exchangers: 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

CENTRIFUGES

2—Baker Perkins 36 HS TerMeer S.S. continuous.
1—Sharples C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18" x 28", 316 S.S. Solid Bowl, Continuous.
1—Bird 36" x 50", 347 S.S. Solid Bowl, Continuous.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Tolhurst 32" Suspended, 316 S.S., imperforate basket.
2—AT&M 48" Suspended, 316 S.S. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. S.S. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
1—1500# Powder Mixer, 7½ HP XP motor.
2—Steel, jktd. Powder Mixers, 225 and 350 cu. ft.
1—36" Simpson Intensive Mixer.

DRYERS

1—Buflovak Vacuum Shelf with 20—60" x 80" shelves.
1—Devine Vacuum Shelf with 19—59" x 78" shelves.
1—Devine Vacuum Shelf with 10—40" x 43" shelves.
2—Buflovak 42" x 120", atmospheric, double drum.
2—Devine 4' x 9', single drum, atmospheric.
1—Buflovak 3' x 10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6" x 6' Rotary Vacuum Dryer.
1—Louisville 6' x 45' 316 SS Rotary Steam Tube Dryer.
2—Louisville Rotary Steam Tube 6' x 25', 6' x 50'.
9—Rotary Dryers, 34" x 30', 4' x 40', 6' x 50', 6' x 60', 7' x 80', 8' x 87'.
2—Louisville 8' x 50' Stainless Steel lined Rotary Dryers.
1—Traylor 30" x 18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5" x 25", 6'4" x 24', S.S. Louvre Dryers.

FILTERS

1—Sperry 18" x 18" Plate and Frame, 316 S.S., 15 chambers.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.
1—Oliver 5'3" x 6' Rotary Vacuum Precoate Filter, 316 S.S.
1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.
2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.
1—Oliver 5'3" x 8' Steel Rotary Vacuum, vaporite housing.
1—Feinc 5' x 6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

MISCELLANEOUS

1—#3TH Mikro Pulverizer, 15 HP.
1—Raymond 10' dia. Single Whizzer Separator.
1—#5 Mikro Atomizer with motor and cyclone.
2—Bantam Mikro Pulverizers, S.S.
1—Ross 6" x 14" Three Roll Mill.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—Robinson Sifters, 40" x 84", Stainless.
1—#24 Rotex Sifter, 20" x 60", Quadruple deck.
8—Stokes; DD2, DDS-2, T, "R", and "F" Tablet Presses.
4—Nash Vacuum Pumps; H6, TS7, #2.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 6".

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4815 G3—Stainless Steel Column with Dished ends; 12" Diameter by 15' high
4570 B3—Still Pot with Stainless Coils; 4' x 3'; capacity 375 gal. 3 Banks of coils
4731 G13—Pfaudler Glass Lined Jacketed Still; 39" x 42"; Clamped, bolted cover
3659 R3—Aluminum Bubble Cap Column, 27½" x 36'; 60 plate
C14-141—Stainless Packed Column; 24" x 14' insulated
C13 C203—Stainless Steel Stripping Column 16" x 18' with Dephlegmator and accessories
C13 S200—New unused Stainless Distillation Column 8" x 32' in 4 Sections; ASME 650 PSI
C13-100—Stainless Absorption Column; Bubble Cap; 6' x 29'
4093 B55—Lummus Copper Alcohol Recovery Unit; 18" Diameter 21' High; 5 sections complete with accessories
2755 R19—Steel Still; steam coil heated; 54" x 96"
4908 S2—Bauerle & Morris Stainless Vacuum Still 18" x 24" 25 Gal. electrically heated with Stainless Condenser
3476 M1-2—Two Copper Jacketed Still Pots 28" x 25" with 12" Dome. Reflux Condenser and Gooseneck; approximately 40 gal.
5020 S/14—Monel Vacuum Still, Gas Fired, 132 Gal. 24" x 30" with 7 Turns of S/S Coil plus S/S Packed Column 15" x 11'9" plus Condenser 4" x 10' . . . complete installation
9508 H3—Aluminum Steam Jacketed Vacuum Still; 40" x 60"
5020 S/16—Stainless Lined Vacuum Still 730 Gal. 60" x 38" Jktd. with Anchor Agitator, 6 Turns of 2" S/S Coil and 12" x 72" Stainless Condenser
4731 G8—Barnstead Copper Water Still; steam operated 100 Gals. per hour
E13-163—Nooter Stainless Steel Vac. Pan; 3'6" x 5'; ASME 150 PSI Jkt. Full Vacuum

PRESSES TABLET-HYDRAULIC

4544 M1—Stokes Eureka Single Punch Tablet Press; motorized
4897 Z3—F. J. Stokes Model E Single Punch Tablet Press
4847 B2—F. J. Stokes Model T Tablet Press; 1¾" x 1¼"; up to 80 per minute; 2 HP Motor
4717F1—Colton Single Punch No. 4½; 1½" x 1½"; 60 per M.
P13 K202—Colton No. 340 Single Punch Press 1⅜" up to 110 per minute
4847 B1—Colton Model No. 5½ Tablet Press; 3" x 2⅛"; up to 50 per minute; 5 HP Motor
4717F2—Kux Model No. 60A; 30 Ton; 2" x 2⅛"; 5 HP motor
P13 M203—F. J. Stokes Model 533 Rotary Tablet Press; 33 Stations 1⅝"; dual Pressure; 1800 per M
P13-105—Stokes Rotary DDS 2 Tablet Press 23 Station; 1-3/16" x ¼"; 7½" HP
3673 L30—Colton No. 1 PT Aut. Tablet Triturate Machines 2600 per M
1302 W19—Colton Rotary #10—35 Tablet Press; 800 per M ¾" x 1¾"
4199—Stokes Model RD3 Rotary Tablet Press with 3 HP variable speed motor
2755 R25—French Oil Mill Hydraulic Press; 24" x 36" Curb or Cage Type; 450 Tons with Hydraulic Pump
4723 D1-8—8 HPM Steeping Presses Type 4R with Hydro Radial Pumps; 30 Platens each 20¼" x 24½"; Cylinder 10" x 73"; Ram Travel 70"
3986 K2—Denison 4 Ton Hydraulic Press; Thermo controls; 3 HP Freon; 5 HP
P11-100—Stewart Bolling Hydr. Press 36" x 36"; 22" ram; 15" Daylight; 425 Ton
P11-200—Baldwin Hydr. Press 11 Platens 42" x 42"; 26" Ram; 600 Ton
2016 S8—Laboratory Press 6" x 6"; 30 Ton with Pump

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3824S-12—Pfaudler Glass Lined Jacketed Agitated Reactor; 12" x 12"
4761 SA—Pfaudler 20 Gal. Glass Lined Jacketed Reactors
4871 D2—Vertical Stainless Deaerator Tank; 18" x 48" Jktd.; good for Full Vacuum; cone bottom
4542—Stainless Steel 60 Gal. ASME Reactor; 20" x 34"; coil heated
4955 M13—Stainless Lined 60 Gal. Reactor 22½" x 34" with Stainless Coils and Agitator
4955 M17—100 Gal. Jacketed Steel Reactor with Anchor Agitator; 28" x 36"; 75 PSI Jkt. 142 PSI Internal; Bolted Swing Cover
3824S-14—Pfaudler Glass Lined Jacketed Agitated Reactor; 36" x 36"
4871 D3-4—Two 250 Gal. Jacketed Tanks ASME; 36" x 55"
5020 S7—Pfaudler Glass Lined Jacketed Agitated 300 Gal. Reactors; 48" x 52"; Dished clamped heads with manhole
4344 H5—Stainless Lined Vertical Pressure Vessel 4' x 4' dished heads; 24" manhole; Internal Heating Coil
4570 B2—Pfaudler 500 Gal. Glass Lined Jacketed Reactor with Anchor Agitator and 5 HP XPL motor
4339 C14—Pfaudler 500 Gal. Glass Lined Jktd. Reactors
4339 C19-25—Five Pfaudler 1000 Gal. Series "R" Glass Lined Jacketed Reactors 54" x 96" ASME
4954 T5—Patterson-Kelley Stainless Steel Percolator or Extractor 200 Gal. 28" x 76"; ASME coded
3561 E2—300 Gal. Reactor; 36" x 66"; manhole top dished heads; Jacketed
3434—Dopp 650 Gal. Cast Iron Full Jktd. Agitated Reactor; 80" x 67"
3934 C41—Steel Reactor; 950 Gal. 5' x 5'6"; agitated; coil heated
R4-1001—Blaw Knox 500 Gal. Autoclave; ASME internal and Jacketed; 4' x 12' overall with agitator
R4 503—Lead Lined Reactor; 1000 Gal. 4' x 4'; Jktd. ASME 50 PSI
4877—Rotating Aluminum Jacketed Vacuum Fermenter 3' x 8' complete with motor
3799V-1—Lancaster Stainless Lined Rotary Reactor; Jktd.; 50" x 17'4" 300 PSI
3870M-2—Mojonnier Stainless Vacuum Pan 3' x 10'
4627 H1—Mojonnier Stainless Vacuum Pan; 6' x 12'; Vertical Counter Current S.S. Condenser; 261 sq. ft.
4767 W1—Harris Stainless Vacuum Pan 6' Diameter with coils, barometric condenser and accessories
4458 G3—900 Gal. Steel Reactor; 5' x 6' Jacketed; Dished Heads; Anchor type agitator
4551 S5—Steel Pressure Kettle 64" x 96"; 1150 gal. Dished Heads; Jacketed and Agitated; motorized
4343 D2—Nickel Clad Reactor; 7' x 11'6"; manhole top; Jacketed and Agitated
4797 B1-2—Patterson 1000 Gal. Closed Jacketed Steel Mixing Kettle agitated by 20 HP XPL motor
4819 M8—Glass Vert. Tank; 6' x 7'; Dished Heads; Top entering Turbine Agit. 3 HP; S S coils
4812 D—Sargent & Wilbur Ammonia Disassociator Type A 10,000 cu. ft. per hour
5051—Blaw Knox Stainless Lab. Reactor; Agitd.; 150 PSI ASME
5027 D2—Type 316 Stainless 1000 Gal. Jacketed, Agitated Reactor 5' x 7'
5048 D1-3-3—Struthers Wells Type 316 Stainless 2000 Gal. Vertical Jacketed, Agitd. Reactors; 10 HP; 6' x 10'

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1—1960 sq. ft. horiz. heat exchanger, T316 SS, ASME.
1—Tolhurst 48" susp. centrifugal, T304 SS perf. basket.
2—Sharples #C-20 Super-D-Hydrators, T316 SS.
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2—Oliver 5'3" dia. x 3' face rotary vac. filter precoat, T316 SS. ASME 30# pressure housing.
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1—2500 gal., T316 SS pressure tank, 70# WP.
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2—Robinson 125 cu. ft. ribbon mixers.
1—J. H. Day 30 cu. ft. jktd. ribbon mixer.
1—Sprout-Waldron 335 cu. ft. ribbon mixer, UNUSED.
2—Baker Perkins #15, 100 gal. sigma blade mixers.
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65—BAKER PERKINS Size #17 200 gal. JACKETED MIXERS, SIGMA or DUPLEX BLADES.

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MILLS—Raymond #00 Pulverizer 30 HP complete Also #000. Mikro Pulverizer #4. 2S1. 2TH. 1SH. Hammer Mills & Pulverizers 3 to 50 HP. Williams #BB. #3 & #2XX Hammer Mills. Rotary Cutters 1 HP & up. Spr Wald. Stainless Spike Crusher. Pebble, Jar & Ball Mills. Lab. to 6' x 9'. 3 Roll, 9" x 32", 12" x 30", 16" x 40". Lehmann 4 Roll W C 12" x 36" Steel.
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PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
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Dryer: Bowen lab. spray, st. st.
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Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Mix-Muller: Simpson Porto 39½" st. st.
Fillers: Stokes & Smith EG-1, st. st.
Centrifugal: Tolhurst 20" type 316 st. st.
Tablet Press: Stokes DD2- 23 station.

Write us or call Seeley 8-1431
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1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter closed del., 3-eye, 39-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
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1—Abbe Pebble Mill 5' x 22'.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.
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1—250 gal. Kettle, nickel jacket, 100#.
1—Bartlett Hog Mill with 7½ H.P. motor.
1—430 S.S. Tank 3000 gal. vert. ¾s plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.
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2—Twin Screw Mixers 120 gal. jkt.
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6—New Syntron Vib. Stainless Elevators, 8'6" lift w/controls.
2—Raymond 4 Roller Hi Side Mills. Model 5047. Dbl. Cone Separator.
2—Patterson 4' x 5' Ball Mills. W/20 HP Master Expl. Prf. Mtr.
1—St. Regis Model 160 FB 2 Spout Valve Bag Filler. W/Feeder.
1—Sperry 36" x 36" Filter Press Skeleton. Hydr. Closing device.

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1—Allis Chalmers SS rotary dryer, 6' x 50, complete with drive, motor, fans and blowers.

2—Louisville SS rotary dryers, 8' x 50', complete with drives, motors, fans, blowers, etc.

1—Traylor 11' x 155' rotary kiln, 2 tires, welded ⅞" shell, complete with drive and motor.

1—Louisville rotary steam tube dryer, 8' x 45'.

1—Rotary dryer 7' x 60', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

1—Rotary dryer 6' x 64', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

1—Rotary dryer 6' x 56', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

1—Rotary dryer 6' x 50', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

1—Rotary dryer 6' x 35', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

1—Western States Model UD type 316 SS under driven centrifuge complete with unloader and motor.

1—Rotary dryer 4' x 20', 2 tires, ½" shell, complete with drive, motor, blowers and all auxiliary equipment.

10—Pacific vertical feed water reciprocating pumps, 10 GPM to 340 GPM, 80' head to 175' head, complete with motors.

1—Dorr Type DSFR-2 classifier, 3' x 20'6" x 2½" slope.

1—Hardinge pilot size ball mill, 24" x 8", complete.

1—Patterson rod mill, 4' x 11'6".

1—Pfaudler glass lined 500 gal. jacketed reactor, complete with anchor type agitator and drive.

4—Davis Engineering Carpenter 20 heat exchangers, 120 sq. ft. each (NEW).

1—Buflovak SS jacketed rotary vacuum dryer, 3' x 15'.

2—Stokes Model 138J-20 single door vacuum shelf dryer, 20 shelves, complete.

1—Pfaudler SS 5 gal. jacketed reactor, complete with impeller type agitator, baffle and drive, 100 psi internal, 78# jacket.

4—Steel jacketed rotary vacuum dryers, 3' x 15', 5' x 20', 5' x 30', 5' x 35'.

1—Fletcher SS 48" whirlwind centrifuge complete with perforate basket and motor.

1—18,000 gal. type 316 SS pressure tank, 11' x 24'.

1—Shriver aluminum 30" P&F filter press, 30 chambers.

1—Sperry aluminum 18" P&F filter press, 16 chambers.

1—Howes 40 cu. ft. horizontal rubber covered ribbon blender.

1—Van Alst 250 gal. SS jacketed kettle with SS packed column and condenser.

2—Sturtevant #7 dustite rotary batch blenders, NEW.

20—Stainless steel condensers 6 to 750 sq. ft.

1—Ross 6" x 14", 3 roll paint mill.

1—Struther Wells type 347 SS pressure vessel, 300 gal. complete with agitator and drive.

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1—Williams Size B, Type AK, 20 h.p. mtr.
2—Sturtevant #0-18" "open door", 20 h.p. mtrs.
1—Jeffrey Size 24x18", Type A2, 30 h.p. mtrs.
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1—Shriver 36" open delivery, washing, cast iron, 45 chambers, 2" cake, Hydro-Kloser.
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1—Readco stainless steel 25 gallon sigma bladed double arm vacuum mixer.

1—Patterson Kelly 20 cu. ft. stainless steel twin shell blender.

1—A T & M 40" suspended centrifuge, bronze basket.

2—8 cu. ft. jacketed double cone blenders.

1—Louisville 7' x 40' rotary warm air dryer, steam heated.

1—Sparkler 18-S-23 stainless steel filter.

1—3' x 24' gas fired rotary dryer.

1—Sharples centrifugal Super-D-Hydrator, stainless steel basket.

3—Stainless steel jacketed and agitated reactors 400, 100, 50 gallons.

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4—Sharples C20 Super-D-Hydrators, 316 S.S.
1—AT&M 26" susp. Cent., perf. bskt. 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
4—Sperry 36" plate & frame Filters, cast iron and wood.
5—8' dia. x 24' rubber lined Crystallizers.

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2—Abbe 5' x 16' brick lined Mills.
2—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

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5—8500 gal. Vertical Storage 8' 6" x 16' x 8' cone.
1—13000 gal. Horizontal Storage 8' x 35'.

MISCELLANEOUS
7—Dorr Thickeners: 16' dia. with Tanks.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
50—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

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Climax Appoints Manager

Climax Molybdenum Company, a division of American Metal Climax, Inc., New York, has named C. Eric Ho manager of catalyst sales and development. Mr. Ho has been with Climax since 1958, serving until now as asistant director of marketing research.

Imports at US Ports

—Continued from page 64

PETROLEUM, CRUDE—111,488 bbls, Gulf Oil Corp, Punta Cardon
274,557 bbls, Gulf Oil Corp, Banias
151,383 bbls, Gulf Oil Corp, Bachaquero
129,857 bbls, Continental Oil Co, San Lorenzo
224,427 bbls, Texaco Co, Covenas
272,309 bbls, Cities Service Oil Co, Bandar Mashur
207,551 bbls, Socony Mobil Oil Co, Mina Al Ahmadi
105,981 bbls, Atlantic Refining Co, La Salina
214,489 bbls, Atlantic Refining Co, Punta de Palmas
135,889 bbls, Atlantic Refining Co, Puerto La Cruz

POTASSIUM CYANATE—100 dms, Whitmoyer Chemical Co, Hamburg

RUTILE SAND—2,000 bgs, Phila Natiinal Bank, Brisbane
3,000 bgs, Sydney

SODIUM ANTIMONIATE—500 bgs, Pigment Chemical Co, Hamburg

ZIRCON SAND—996 bgs, Chemical Bank, Brisbane
2,015 bgs, Sydney

San Francisco

CALCIUM CARBONATE—2,000 bgs, Pluess Stauffer, Antwerp

CALCIUM CHLORIDE—500 bgs, Solvay & Co, Antwerp

CARAWAY SEED—75 bgs, McClintock Stern Co, Rotterdam

CARDAMOM—5 cs, Wm E Martin & Sons, Stockholm

CARNAUBA WAX—112 bgs, Everitt & Ray, Fortaleza
56 bgs, Cornelius Wax Refining Corp, Fortaleza

CASEIN—440 bgs, Borden Co, Buenos Aires
3,200 bgs, E Lang, Buenos Aires
200 bgs, First Spice Co, Rotterdam

COPRA—1,000 tons, Cargill Inc, Plaridel

DEXTRIN—200 bgs, Amsterdam

FISHMEAL—4,404 bgs, Marine & Animal By Products Corp, Arica
5,002 bgs, Wilbur Ellis Co, Callao
2,174 bgs, Callao
2,493 bgs, Chimbote

GYPSUM, CRUDE—10,137 tons, Kaiser Gypsum Co, San Marcos

IRON OXIDE—120 bgs, S L Abbot Co, Antwerp

LIVERMEAL—396 bgs, International Packers Ltd, Buenos Aires

OITICICA OIL—198 tons, Irving Trust Co, Fortaleza

PAPRIKA—200 bgs, Manufacturers Trust Co, Marseille
100 bgs, A Schilling & Co, Marseille

PEATMOSS—225 bls, H M Newhall & Co, Bremen
500 bls, H N Senasac Imports, Bremen

PEPPER, RED—100 bgs, Hismoco American Co, Kobe
140 bgs, W R Grace & Co, Kobe
100 bgs, American Commerce Co, Kobe

PETROLEUM, CRUDE—294,947 bbls, Standard Oil Co, Dumai
27,298 tons, Tidewater Oil Co, Mina Saud

POLYVINYL ALCOHOL—800 bgs, Marubeni Iida Co, Kobe

SODIUM CYANIDE—400 dms, C M C Chemicals, Liverpool

SODIUM SILICOFLUORIDE—100 bgs, D M Hicks, Rotterdam

TRICHLOROETHYLENE—600 dms, C M C Chemicals, Liverpool

TUNG OIL—53 tons, Internatio Rotterdam, Buenos Aires
67 tons, Pacific Vegetable Oil Corp, Buenos Aires

UREA—2,500 bgs, Atkins Kroll & Co, Antwerp
10 bgs, Millmaster International, Antwerp

ZINC CYANIDE—40 dms, C M C Chemicals, Liverpool

Los Angeles

COPRA—5,563 bgs, American Trust Co, Zamboanga
1,000 tons, American Trust Co, Cebu
1,000 tons, American Trust Co, Tobaco
800 tons, American Trust Co, Siain

EARTH COLORS—225 bgs, Naftone Inc, Bremen
200 bgs, American Chemical Co, Bremen

MOLASSES—3,126 tons, Pacific Molasses Co, Tapolobampo

NAPHTHA—3,965 tons, Union Oil Co, Shimotsu

PEPPER, RED—200 bgs, Citizens Bank, Yokohama
200 bgs, T P Gonzales, Yokohama
100 bgs, T P Gonzales, Kobe

PETROLEUM, CRUDE—170,902 bbls, Richfield Oil Co, Punta Cardon
136,494 bbls, Wilshire Oil Co, Bandar Mashur
150,000 bbls, Sunland Refining Corp, Bandar Mashur
127,983 bbls, Powerline Oil Co, Aruba
20,000 bbls, Palomar Oil Co, Bandar Mashur

Oils, Fats and Waxes

—Continued from page 74

and Parnahyba, $1.08 to $1.10, spot, as to quantity.

The situation in candelilla wax was unchanged. Stocks were still scarce, with buyers still holding off awaiting current high prices to subside. Light sales of crude were reported from 65c. to 70c. per pound, spot, according to seller and quantity.

Beeswax crude and refined grades were unchanged and steady. Demand was moderate, chiefly to actual needs.

Century Names Frohlich

Dr. Walter G. Frohlich has been appointed managing director of European operations for the international division of Century Chemical Corporation, New York, effective immediately. Dr. Frohlich's previous position was with Chemo Puro AG, a wholly-owned subsidiary acquired by Century last December.

Stokes—3 DDS2.
2—Baker Perkins Stainless Steel, 2 arm, jacketed, vacuum, hydraulic tilt, 150 gal—40 HP, 100 gal—50 HP.
Blaw-Knox—2 gal. S.S. Autoclave, 5000 lb.
Vulcanizer 60" x 9'—125 lbs.
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Mills—Pebble—Lab Jars (new)—30" x 42", 36 x 36, 36 x 42, 4' x 5' new porcelain lining—6' x 8' Buhrstone—w/motor drives.
Dryer—Vacuum—Stokes Model 3, 17½ x 23—Devine 356 sq. ft., 13 shelves, 59" x 78" w/Condenser.
Filter Presses—8" Lead—18" S/S Sperry 15 ch—18" Sperry #41—36" Shriver 49 chambers.
Bag Filler—St. Regis 105 FV, single, 3 bgs./min., 25/50/100#.
Screens—Tyler Hummer—3 x 5 (unused)—3 x 5 double—3 x 10 double Tyler Niagara 18" x 6' — 3' x 8' double.
Filters — Rotary Vacuum — 48" x 12", 48" x 36" Eimco — 11'6" x 16' S/S Dorr—Sparkler 33D16, 33S28 S/S.

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1—Stainless Ribbon Blender 800#, jacketed.
1—Stokes #38 Drying Cabinet, 16 shelves.
1—Lydon Electrically Heated Dryer 40 shelves, 18" x 36".
4—Stainless Vacuum Receivers 100 to 350 gals.
12—Stainless Jack. Kettles 50 to 100 gals.
5—Stainless Steel Tanks 500 & 600 gals.
10—Stainless Tanks 100 to 300 gals.
1—S. & S. Universal Auger Filler, Stainless Steel.
1—Stokes 90-D Automatic Tube Filler, S.S.
2—Stokes "E" & "F" Single Punch Tablet Presses.
1—Stokes "R" Single Punch Tablet Press.
1—Stainless Steel Condenser 51 sq. ft.
1—Jeffrey Traylor Stainless Steel Vibrating Screen 30 x 68 Double Deck.
1—Day #31 Roball Sifter—Stainless Steel.
1—Raymond 30" Double Whizzer Separator.
1—Rotoclone Size 16 Type W—15 HP.
1—Fletcher Type 316 S.S. 30" Sus. Centrifugal.
Agitators, Conveyors, Fillers, Labelers, etc.
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1—46" dia. X 34' long Accumulator Tank ASME—1300# press.
1—400 Gals. Struthers-Wells Reactor, all Stainless, Jacketed, with 7-½ H.P. Motoreducer Drive.
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Current Market Quotations

—Continued from page 35

Xylenol, cryst., 60°-62° C., m.p., dms., l.c.l., same basis	lb.	.40	—
Xylenol fraction, b.r. 7°-9° C., dry above 227° C. dms., c.l., same basis	gal	1.25	—
dms., l.c.l., same basis	gal	1.30	—
tanks, same basis	gal	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis	gal	1.35	—
dms., l.c.l., same basis	gal	1.40	—
tanks, same basis	gal	1.15	—
2,4-Xylidine, tech., dms. frt. alld.	lb	1.15	—
2,5-Xylidine, tech., dms. frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb.	.38	—

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd	lb.	.27	—
dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
USP, 90 int'l B units per gram, 100-lb dms	lb.	.52	—
USP, 200 Int'l B units per gram, 100-lb. dms	lb.	.56	—
USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	—
Yerba, USP dlvd	lb	.18	—

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	.45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	22.00
extra, bots.	lb.	28.00	33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb lots or more, dlvd.	lb.	.343	—
bgs. smaller lots, dlvd	lb.	.373	—
Zinc acetate, NF, VIII, dms.	lb.	.53	—
Tech. dms. l.t.l. works	lb.	.29¼-	—
Zinc borate, bgs. 1,000 lbs or more, works	lb.	.25	—
bgs., less than 1,000 lbs. same basis	lb.	.27	—
Zinc chloride, NF, gran. dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech. soln. 50%, dms. c.l., works. 100 lbs	5.80		—
dms., l.c.l., works 100 lbs.	6.40		—
tanks, works 100 lbs.	5.15		—
fused, dms., c.l., works 100 lbs.	10.70		—
dms. l.c.l. works 100 lbs.	11.20		—
gran., fib, dms., c.l., works. 100 lbs.	11.45		—
fib dms. l.c.l. works 100 lbs.	11.95		—
Zinc chromate bbls. dlvd.	lb.	.29	—
Basic, bbls. dlvd	lb.	.34	—
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust, comt., bbls., c.l., works.	lb.	.17	—
Pigment, bbls., c.l., works	lb.	.16½-	—
bbls., l.c.l., works	lb.	.18¼-	—
Zinc fluoride, bbls., works	lb.	.49	.80
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½-	—
dms. l.c.l. frt. alld	lb.	.23½-	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.12½-	—
Prime western, slabs, New York	lb.	.13	—
Zinc naphthenate, liq. 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	—
Zinc oxide, pigment, American process., lead-free, bgs. c.l., frt. alld	lb.	.14½-	—
bgs. l.c.l. 10 tons or more, same basis	lb.	.15	—
lead-free, bgs., l.c.l., smaller lots, same basis	lb.	.15½-	—
leaded, 35% bgs. c.l., mills, frt alld	lb.	.15⅜-	—
bgs. l.c.l. 10 tons or more, same basis	lb.	.15⅞-	—
leaded, 50% bgs. c.l., same basis	lb.	.15¾-	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¼-	—
bgs. l.c.l. smaller lots, same basis	lb.	.16⅜-	—
French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼-	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¾-	—
bgs. l.c.l. smaller lots, same basis	lb.	.17¼-	—
red seal, bgs., c.l., same basis.	lb.	.15¾-	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼-	—
red seal, bgs., l.c.l., smaller lots, same basis	lb.	.16¾-	—
white seal, bgs. c.l., same basis	lb.	.16¾-	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.17¼-	—
bgs., l.c.l., smaller lots, same basis	lb.	.17¾-	—
Zinc oxide, USP, dms. c.l. frt. alld.	lb.	.18¼-	—
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾-	—
dms., l.c.l., smaller lots, same basis	lb.	.19¼-	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	.46
NF, powd., dms	lb.	.48	.49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼-	—
Zinc silicofluoride, dms., works	lb.	.12½-	.14
Zinc stearate, tech., USP, ctns., c.l.,	lb.	.41	—
ctns., l.c.l.	lb.	.42	.46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs.		8.75	—
bgs., l.c.l., dlvd. E 100 lbs.		9.75	—
USP, gran., dms.	lb.	.26	—
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide pure, bgs., c.l., dlvd	lb.	.2530-	—
Zinc undecylenate, dms	lb.	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, ogs., c.l., works 100 lbs.		10.25	—
bbls, c.l., works 100 lbs.		10.85	—
bbls., l.c.l., works 100 lbs.		11.35	—
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	—
Normal, 250-lb dms., frt. alld	lb.	.52	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½-	—
bgs., 5 tons to c.l., works	lb.	.03⅝-	—
bgs., 1 ton to 9,999-lb lots, works.	lb.	.04	—
bgs., smaller lots, works	lb.	.06½-	—
Zircon (G), milled, bgs., c.l., works.	lb.	.04½-	—
bgs., 5 tons to c.l., works	lb.	.04¾-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝-	—
bgs. 500-1,999-lb lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	—
Zirconium hydride, powd. electronic grade dms. works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls or bgs. works	lb.	1.50	—
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½-	—
bgs., smaller lots, works	lb.	.51	—
milled, bgs., c.l. works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	—
bgs., smaller lots, works lb.		.66	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½-	—

Trade Name Chemicals

—Continued from page 44

tive, defoaming agents and emulsifiers, dispersed in a small amount of water.

According to Seydel-Woolley. **"Seyco SC,"** containing this balance of fats, lubricants and waxes, better resists sticking of semi-dried size to roller cylinders. Further, the hygroscopic salts present will react with starch to form a more flexible and adhesive film and thereby perform the function of gums or binders and at the same time resist overdrying and scorching of the size when the slasher is run at slow speed.

Another feature of **"Seyco SC"** as listed by the company is the fact that in most cases it will resist excessive foaming of size and it will not affect enzyme action and may be added to kettle at the beginning of the cooking cycle even if the enzyme is used as a thinning agent.

"Seydel-Woolley suggests **"Seyco SC"** for medium and heavy yarns and on any twill, sateen, drill, multiharness dobby weaves and other such styles. Concerning usage, it is generally used on the basis of from 6 to 8 percent on the weight of starch or film former used.

Softening Agents

Hamilton Chemical Corporation produces **"Hamco Softwear C,"** which is a cationic substantive softener to be applied by conventional means to synthetic fibers as well as to natural cellulosic and protein fibers. A creamy white paste, **"Hamco Softwear C"** has 50 percent solids content and a pH of 5.0 to 5.5 in a one percent solution.

Hamilton continues describing the properties of their softener by saying that it is readily dissolvable in water at 160 to 170°F. Furthermore, finishes are durable to washing and dry cleaning and very resistant to discoloration even at resin curing temperatures. Besides imparting outstanding softness, drape, body and lubricity to all fibers, the company claims that **"Hamco Softwear C"** imparts moderate germicidal and bacteriostatic properties to fibers and fabrics.

With regard to application of **"Hamco Softwear C,"** Hamilton reports that the concentration to be applied depends on the methods of application, the nature of the fiber or fabric and desired degree of softness. Generally speaking, however, **"Hamco Softwear C"** is said to be exhaustible onto a fiber, etc., from a solution of ½ to 3 percent based on the weight of the material applied at 100 to 180°F. for 10 to 30 minutes. But, if the material to be softened contains residual alkali, a treatment of one percent acetic acid at 70°F. for a few minutes should precede the application of the softener.

Finally, Hamilton states that **"Hamco Softwear C"** may be readily padded onto a fabric from a ½ to 3 percent solution either alone or in conjunction with conventional starch, thermoplastic or thermosetting resin finishes.

A textile softener and lubricant produced by Onyx Oil & Chemical Company is **"Lurasan."** This is an anionic, white paste which has 30 percent activity, and a pH or 9.0 to 9.5 in a one percent solution. As for stability properties, it has good stability to dilute alkali, fair stability to dilute acid, and only limited stability to hard water. However, Onyx says that it is easily soluble in water at 120 to 130°F.

Listing some of the advantages of their softener, Onyx claims that **"Lurasan"** has excellent resistance to yellowing during curing and setting, and complete resistance to chlorine retention. Further, it is said to improve the sewability of resin treated fabrics and to increase tear strength and abrasion resistance on resinated fabrics.

Onyx continues by saying that odor free and with no signs of rancidity upon aging, **"Lurasan"** forms highly stable stock solutions, and provides a full, round, soft hand to many natural and synthetic fibers alike.

Preparation of the softening bath involves stirring the required amount of **"Lurasan"** into water at 120 to 130° F., and if further dilution is needed this can be accomplished with cold water. With regard to applications, **"Lurasan"** affords a full, silky hand to "wash and wear" cottons with only 1.5 to 3.0 percent softener needed. For general cotton and rayon softening processes, Onyx says that one to two percent **"Lurasan"** is sufficient. As a top softener for resin treated fabric, Onyx suggest that padding 2 to 3 percent of **"Lurasan"** will eliminate undue boardiness or harshness on resin treated fabrics.

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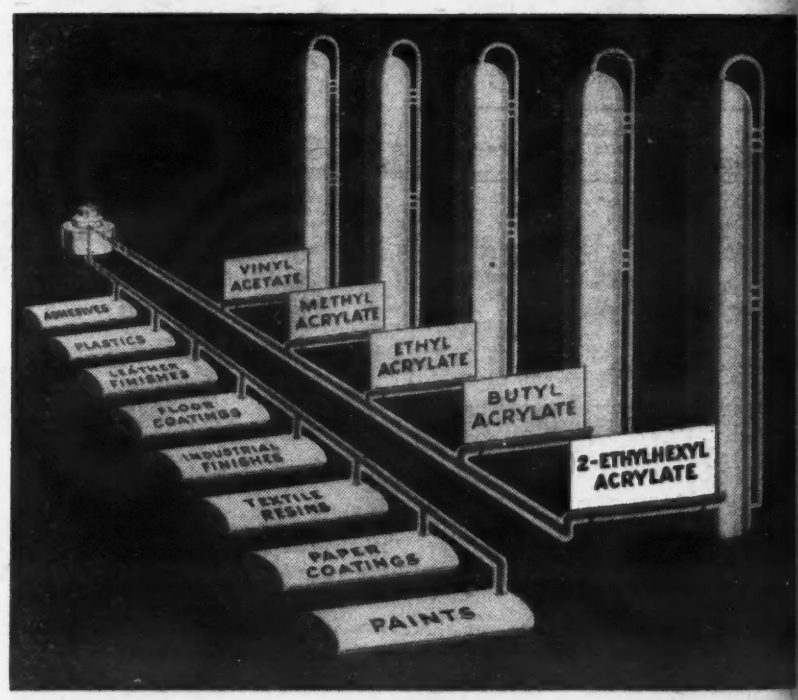

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